

## 2.0 General Survey

A central component of the market research study was a general survey of the Indiana population aimed at validating INDOT's Policy Plan and identifying emerging areas on which INDOT should focus. The survey also provided an opportunity to identify what transportation issues are important to Indiana residents, and how well INDOT performs in these areas. Ultimately, many of the survey questions may become the basis for customer-based performance measures that INDOT could monitor periodically.

The survey was prepared and carried out in these steps:

1. Cambridge Systematics developed a draft survey instrument aimed at probing INDOT's nine policy areas, and addressing potential customer-based performance measures.
2. Cambridge Systematics worked with The Blackstone Group to carry out two focus groups in Indianapolis in March 2003. The primary purpose of the focus groups was to test the approach to the survey and wording of questions. The secondary purpose was to gain a sense of attitudes. One of the focus groups was oriented towards Indianapolis residents, while the other was oriented to suburban Indianapolis residents. The focus group findings are not statistically significant, but do provide some interesting anecdotal insights. The focus group report is provided in Appendix A.
3. Cambridge Systematics developed a phone survey instrument in consultation with INDOT staff and Indiana University Public Opinion Laboratory. The survey was carried out in May 2003. A copy of the survey instrument is included in Appendix B.

The methods and results of the survey are explained in presentation format in the remaining pages of this section. Appendix C has a summary of the responses to the survey, and Appendix D has the transcripts of the open-ended responses.

research  
summary

# Analysis Objectives

- **Support the long range transportation plan**
  - **“Validate” the 9 policy areas**
  - **Identify emerging areas of focus**
  
- **“Listen to Indiana residents”**
  - **What is important to them?**
  - **How does INDOT perform in each area?**
  - **How can INDOT best respond to their needs and wants?**
  
- **Consider needs of different market segments**
  - **Geographic**
  - **Demographic**

## ***Relationship to Other INDOT Activities***

- **Environmental Justice (EJ).** How does INDOT respond to EJ populations?<sup>1</sup> EJ populations are defined as
  - Being of race/ethnicity other than white
  - Being of more than one race
  - A single person earning less than \$15,000 per year
  - Belonging to a household of two or more people that earns less than \$25,000 per year
  - Belonging to a household of three or more people that earns less than \$35,000
  
- **Performance measures.** Market research findings can be used as the basis for customer-oriented performance measures.
  - Can monitor Hoosiers' "pulse" over time

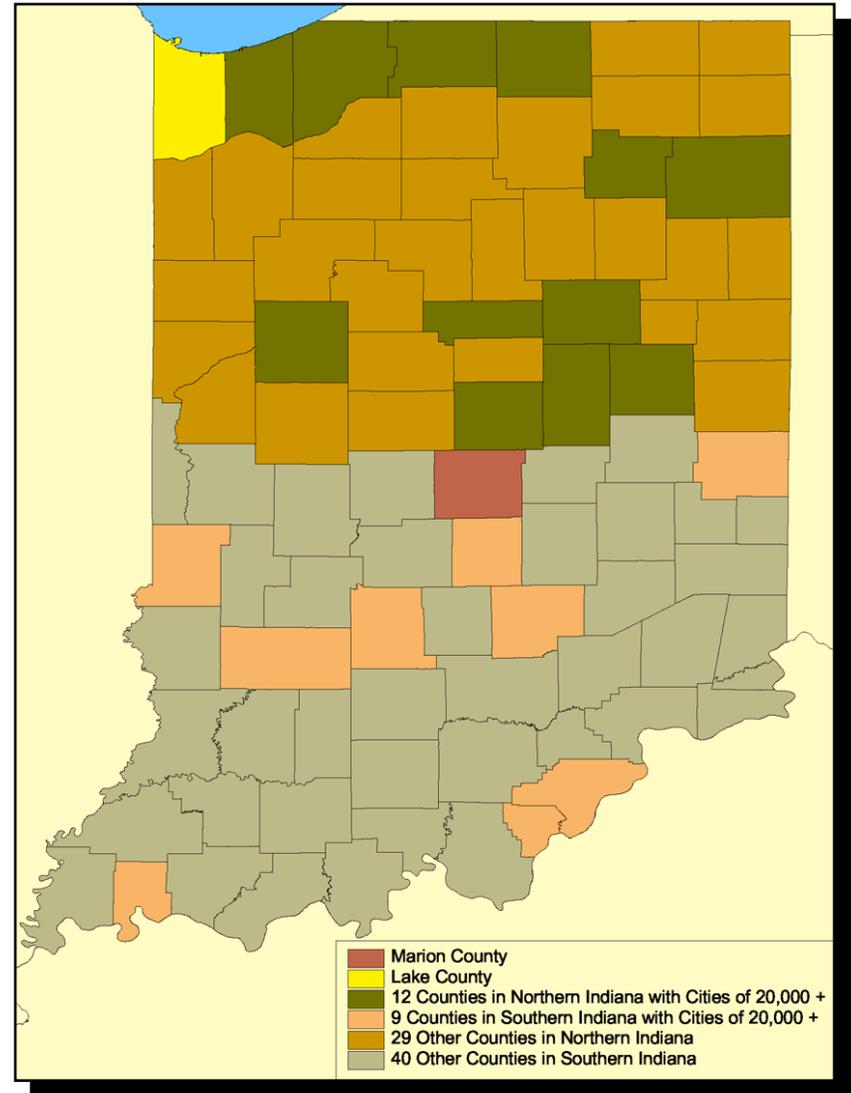
<sup>1</sup> More detail on this topic is provided in a separate memorandum

# Survey Research Design

- Telephone survey
  - 10-15 minutes long
  - Random digit dialing (RDD) covering all of Indiana
- A random individual in the household was selected
- Survey design
  - Probed policy areas in long range plan
  - Explored emerging policy areas
- INDOT staff and focus group findings influenced design
- Survey pre-test influenced final refinements

# Sample Design

- **Counties were grouped into 6 homogeneous strata**
  - Marion County
  - Lake County
  - 12 counties in northern Indiana with cities of 20,000+
  - 9 counties in southern Indiana with cities of 50,000+
  - 29 other counties in northern Indiana
  - 40 other counties in southern Indiana
- **Stratified sample used for efficiency**
- **Representative sample expanded to the entire state**



# Survey Weighting

- We over sampled households in Lake and Marion counties
  - They had a higher incidence of EJ population
  - By collecting a random sample of households in these counties, we achieved a higher EJ sample
  
- Census 2000 was the basis for weighting (see table on next page)
  - Survey weighting factors were determined by
$$\frac{\text{Strata's share of census population}}{\text{Strata's share of survey sample}}$$

# Survey Weighting

Survey Strata	Census	Survey Incidence	Weight
Marion	15.1%	20.8%	0.73
Lake	7.8%	20.8%	0.37
Northern Indiana with Large Cities	29.4%	14.6%	2.01
South Indiana with Large Cities	14.4%	14.6%	0.99
Other Northern Indiana Counties	13.9%	14.6%	0.95
Other Southern Indiana Counties	19.4%	14.6%	1.34

# Categories of Questionnaire Topics

- **Importance** of different policy areas
- Ratings of **priorities** for transportation policy initiatives
- **Satisfaction** with specific INDOT services
- Awareness and image of INDOT
- Overall satisfaction with INDOT and recent performance
- Recent experiences with INDOT highway facilities
- Travel behavior and socioeconomic characteristics

# Analysis Framework

- **Described travel behavior and socio-economic characteristics**
- **Identified differences in answers by market segment**
  - **Used analysis of variance, chi-square, and t-tests**
- **Identified significant differences according to**
  - **Geography by the 6 strata**
  - **Socioeconomics**
    - EJ household
    - Income, gender, age,
    - Auto ownership, household size
  - **Travel behavior – Miles driven per year**

significant  
findings

## Key Take-Aways

- **Indiana residents mostly agree with INDOT's priorities**
- **Funding allocation appears to be “about right”**
- **If a reallocation were to be made, funding should shift to**
  - **Transit and intercity air**
  - **New road construction instead of maintenance**
- **People are generally aware of INDOT but its exposure could be increased**
- **High and uniform “overall satisfaction” with INDOT**
- **Customers' view of INDOT has remained the same or has slightly improved over the past 12 months**

*continued on next page.....*

## ***Key Take-Aways (continued)***

- **INDOT has a positive image in**
  - **Trustworthiness**
  - **Keeping drivers safe**
  - **Helping Indiana's economy**
  
- **Areas of concern include**
  - **Completing construction/maintenance projects on time**
  - **Treating all parts of the state fairly**

## ***Implications for Long-Range Planning***

- **Nine policy areas are still relevant**
- **People think that INDOT should focus on**
  - **Congestion management**
  - **Improved highway maintenance**
  - **Scheduling of construction and maintenance projects**
- **Land resources and homeland security are key emerging issues**
- **INDOT's role in bus and passenger rail service is polarized**
- **Safety and signage are big positives for INDOT**

travel behavior and  
usage of INDOT facilities

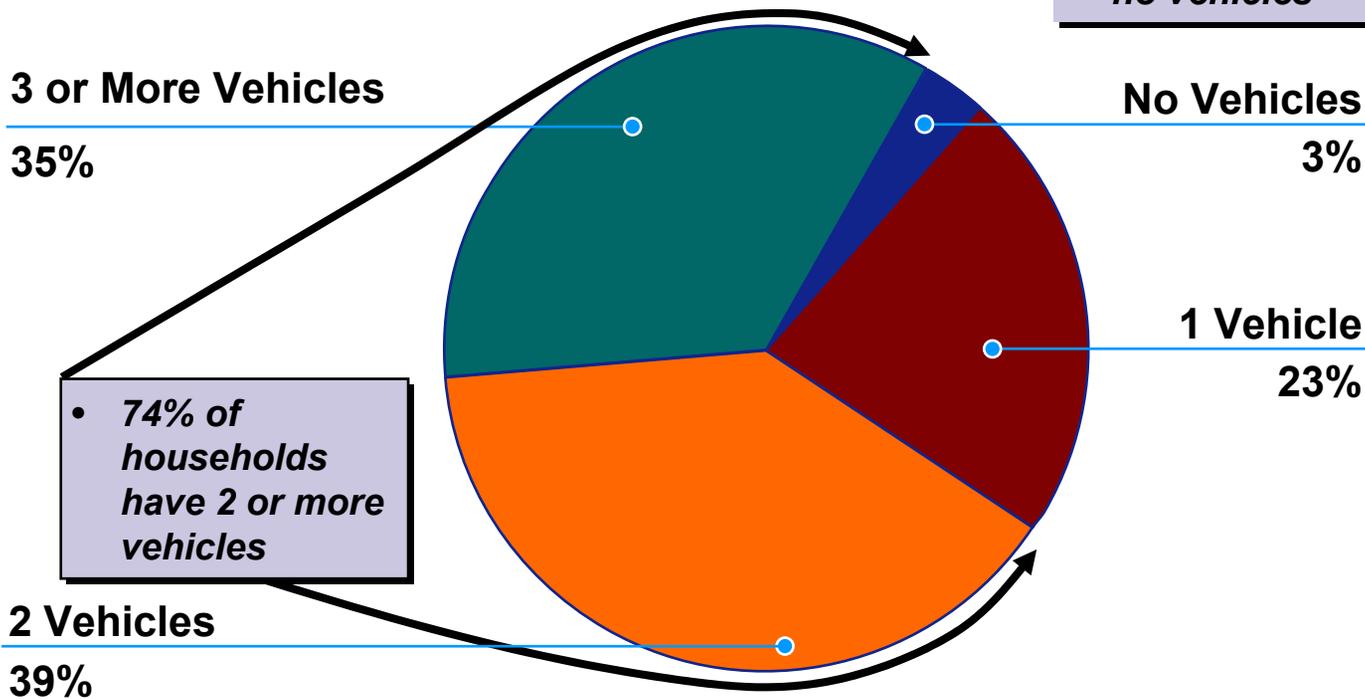
## **Customer Travel Characteristics Summary (details on following pages)**

- **High auto ownership – only 3 percent without an auto**
- **Automobile travel**
  - **22 percent of individuals drove more than 15,000 miles/year**
  - **42 percent of households drove more than 20,000 miles/year**
- **Travel by other modes**
  - **43 percent traveled by air in last 12 months; 6.2 percent used Amtrak**
  - **Fairly low transit use in last month**
    - 4.9 percent used transit at least once
    - Higher in urban areas – 9 percent in Lake County, 7 percent in Marion County, 6 percent in Northern Indiana
  - **Only 1.3 percent used transit 10 or more times each month**

# Vehicle Availability in Household

- *Lowest auto ownership was in Marion County*
- *Highest was in southern Indiana*
- *Highly correlated with household size and Income*

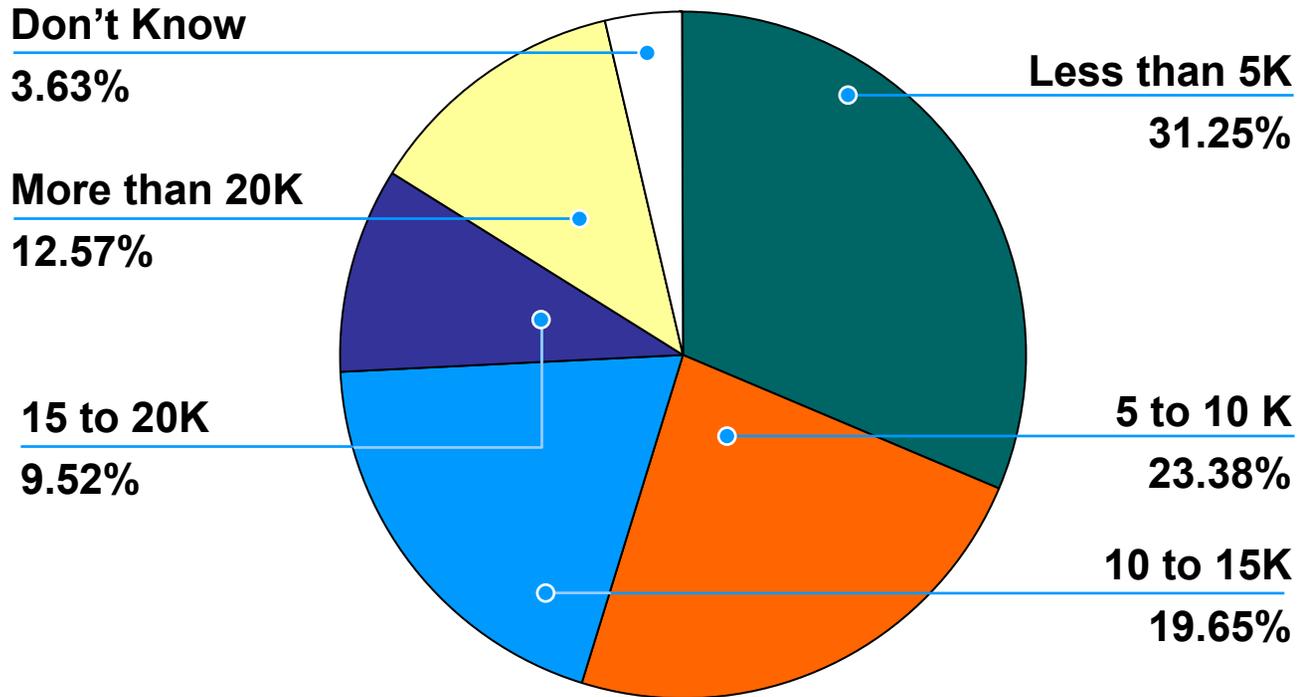
- *Only 3% have no vehicles*



- *74% of households have 2 or more vehicles*

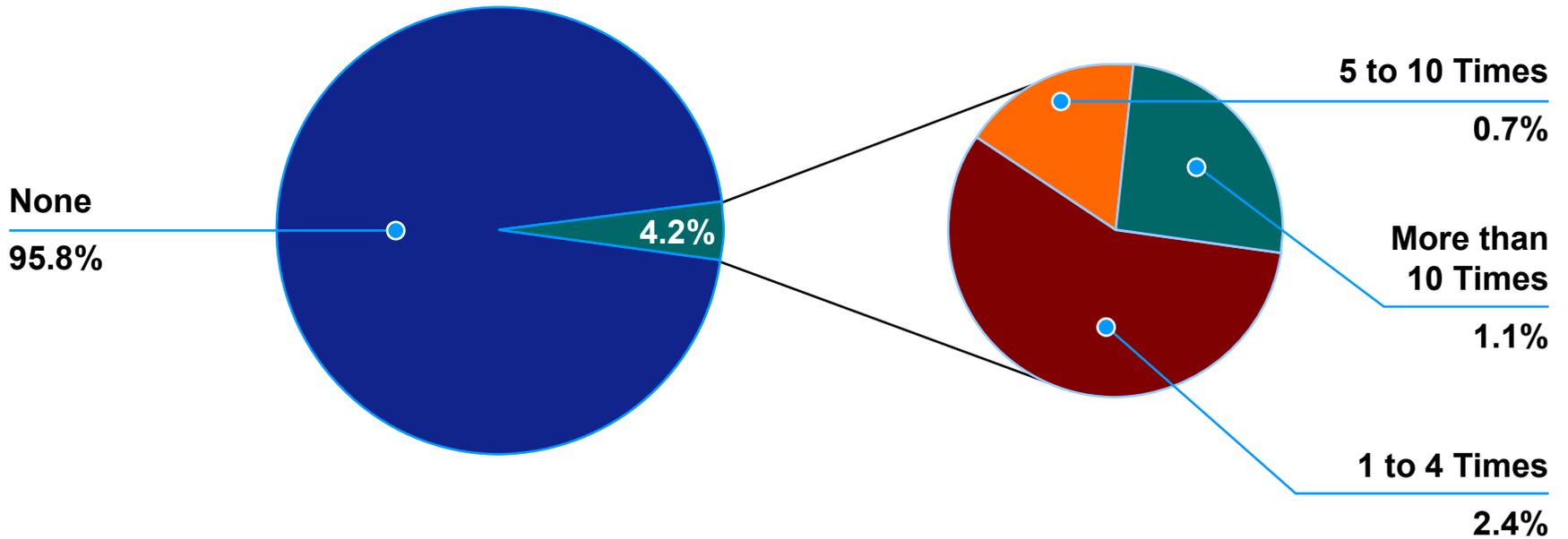
# Miles Traveled by Person in Past 12 Months

- *The amount of driving varies by geography*
- *People that drive 20,000 or more miles are twice as likely to be in rural counties*



# Public Transit Usage<sup>1</sup> in the Past Month

- Fairly low transit usage
- Higher in urban areas

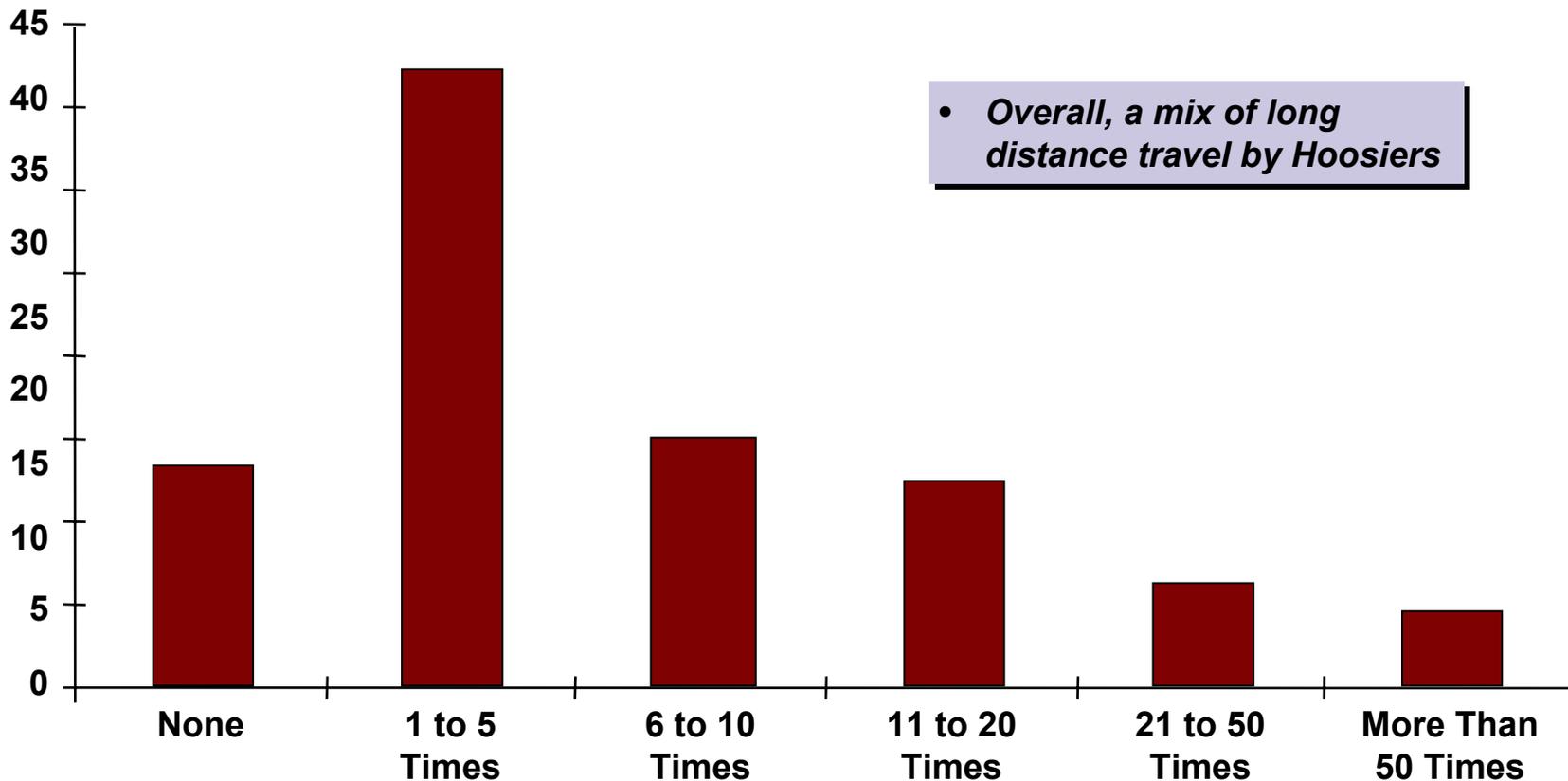


<sup>1</sup> Public Bus or Train

# Annual Long-Distance Trips

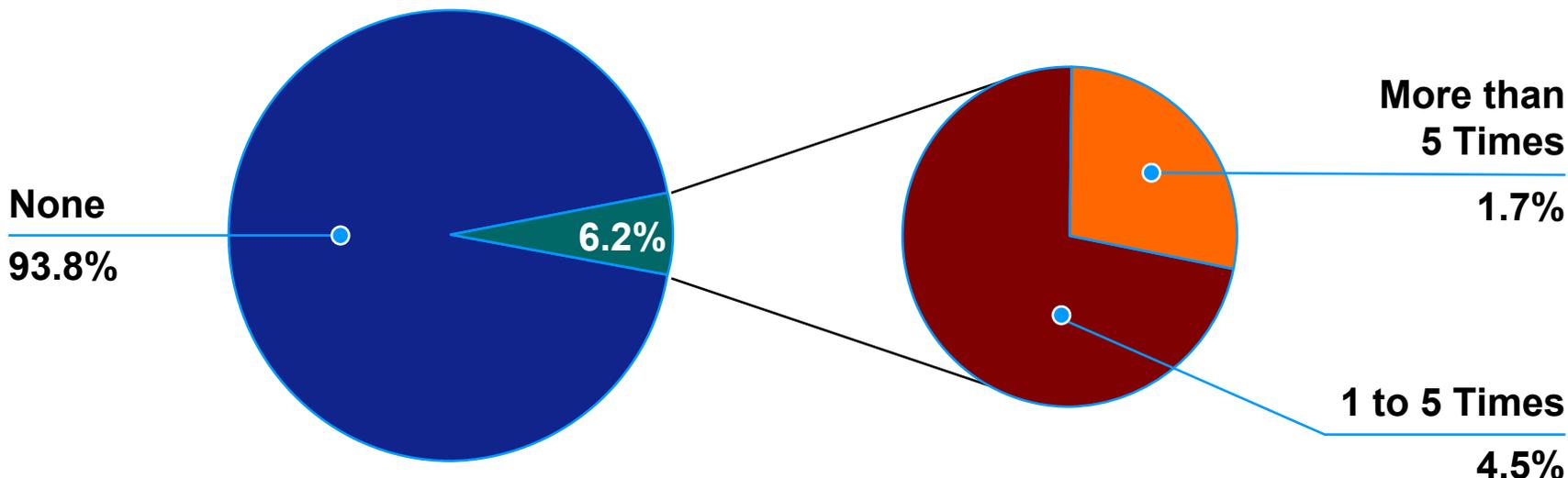
## Number of Times Respondent has made a Trip of 75 Miles or More in Past 12 Months

Percent of Respondents



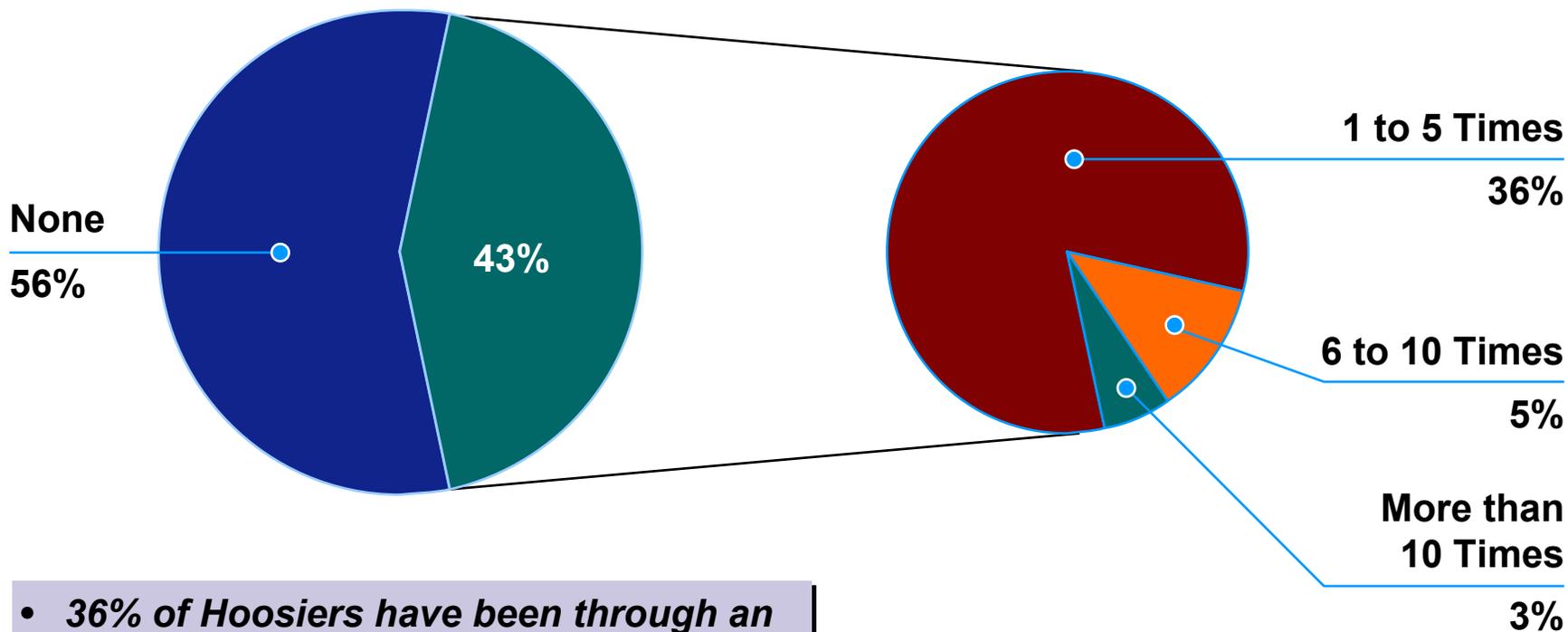
# Annual Usage of Amtrak

## Number of Times Respondent has Ridden Amtrak in the Past 12 Months



# Annual Usage of Indiana Airports

## Number of Times Respondent has Traveled Through an Indiana Airport in the Past 12 Months

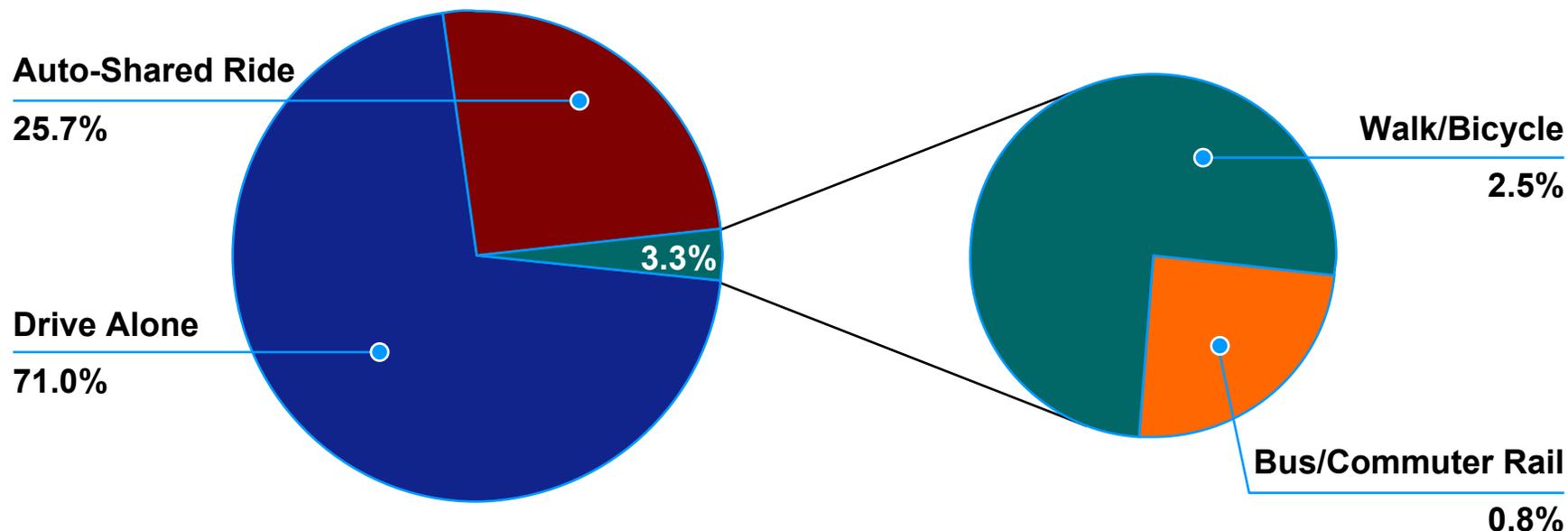


• 36% of Hoosiers have been through an airport at least once in the past year

# Usual Commuting Mode

## Usual Mode of Travel to Work in Past Week (of Those Working Outside Their Home)

- 97% of commute trips are by car

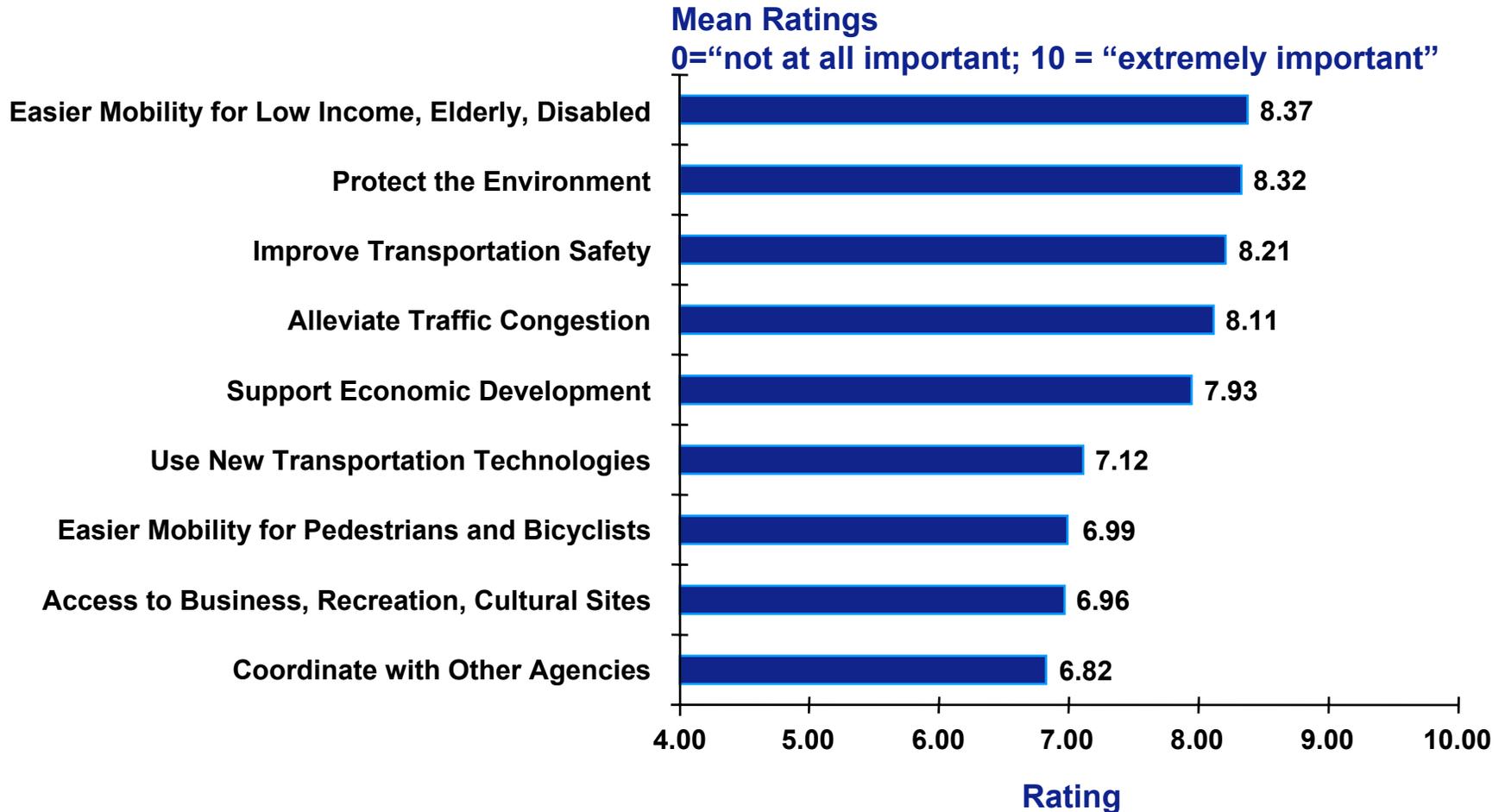




how important are  
various aspects of a state transportation agency's  
role to you?

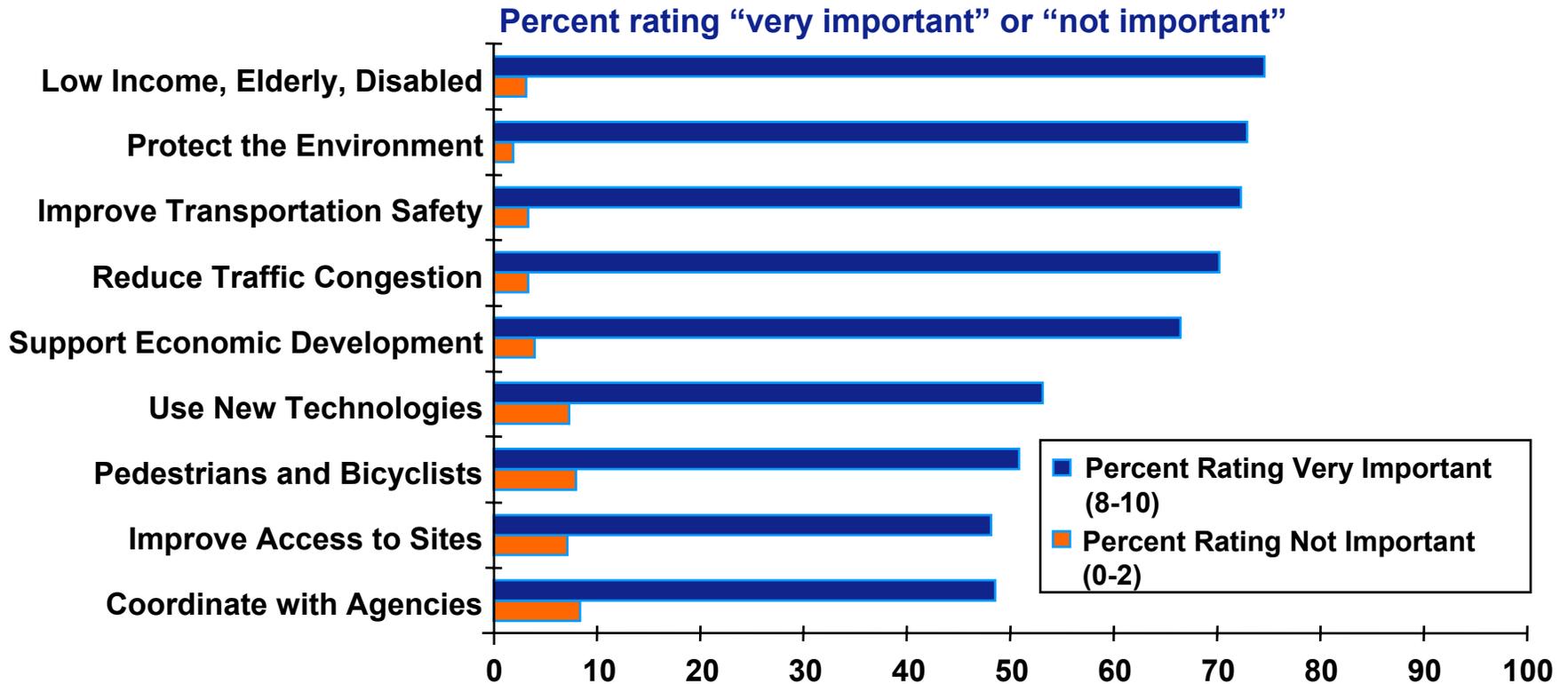
# How Important are These Topics to You?

## Topics in Current Policy Plan



# Extremities of Opinions Topics in Current Policy Plan

*INDOT's nine policy areas continue to be relevant*



# How Important are These Topics to You?

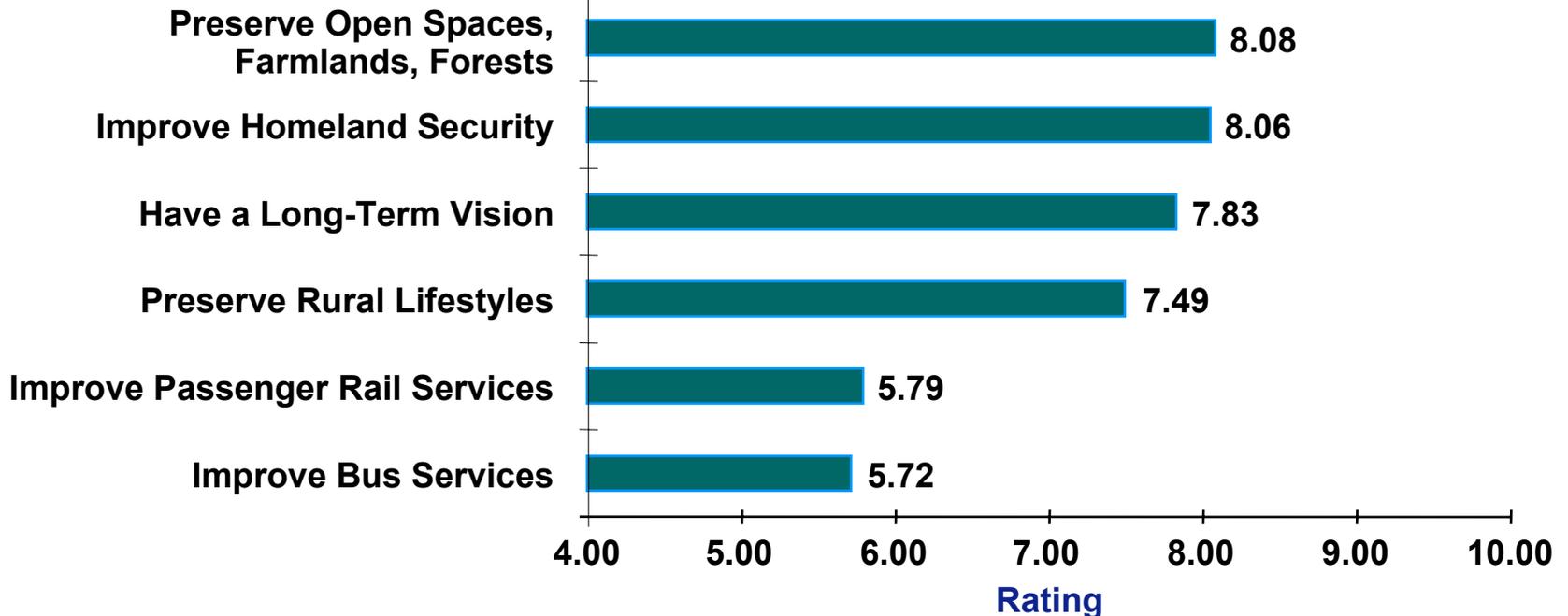
## Emerging Issues

### Most important emerging issues

- Preservation of open spaces and farmland
- Improvement of homeland security

### Mean Ratings

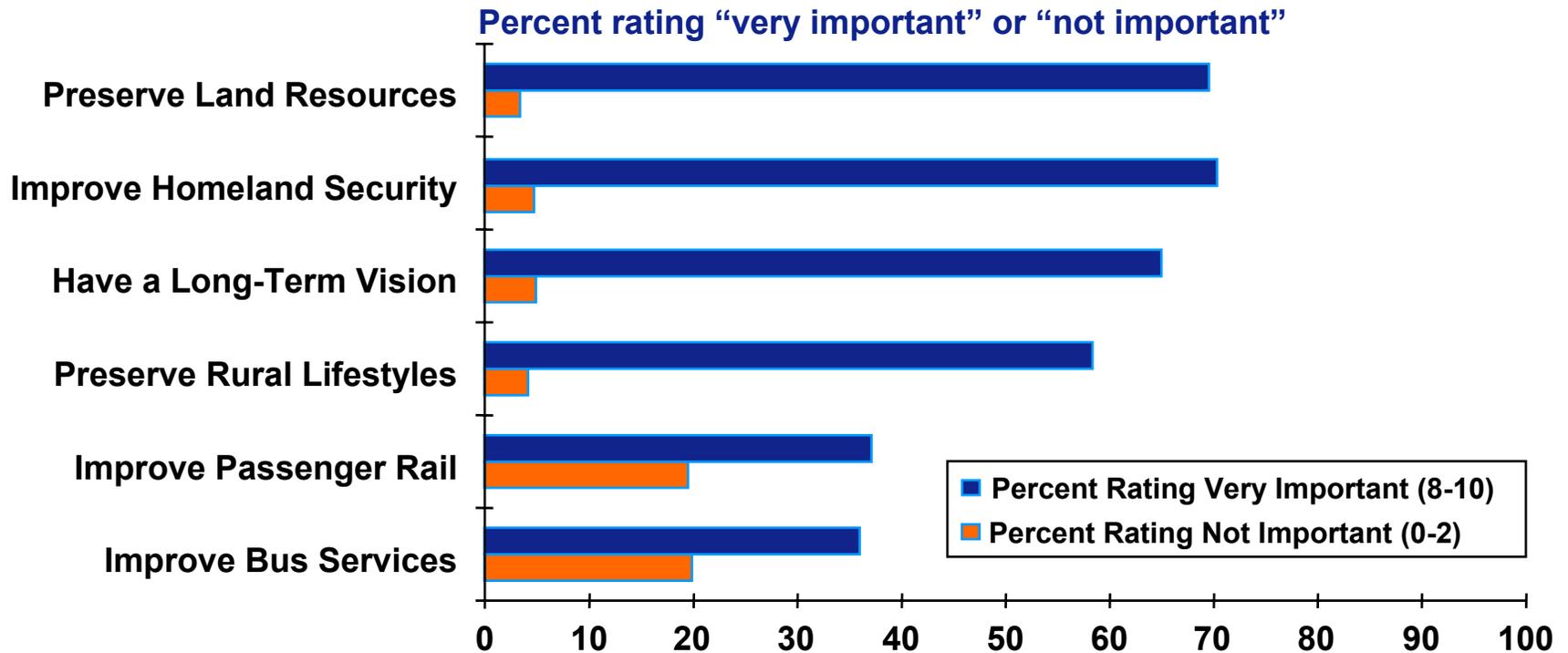
0="not at all important; 10 = "extremely important"



# Extremities of Opinions Emerging Issues

**Most polarizing emerging issues**

- *Improving passenger rail and bus service*



## ***Differences by Market Segment***

- **By gender**
  - **Women placed higher importance on all topics**
  
- **By geography**
  - **Congestion most important in Northwest Indiana**
  - **Transit very important in Northwest Indiana and Marion County**
  
- **EJ groups, as distinct from the general public**
  - **EJ population places greater importance on roughly half of the statements**
  - **Greatest difference on bus and rail service improvements**

## ***Women's Point of View***

- **Place higher importance on everything than men**
- **Differences most pronounced when evaluating**
  - **Improvements in transportation safety**
  - **Enhanced mobility for low income, disabled, and elderly**
  - **Easier mobility for pedestrian and bicyclists**
  - **Improvements in homeland security**
  - **Preservation of open space, farmlands, and forests**
- **Women appear to be a more receptive audience for improvements of a more qualitative nature**

## ***Differences by Geography***

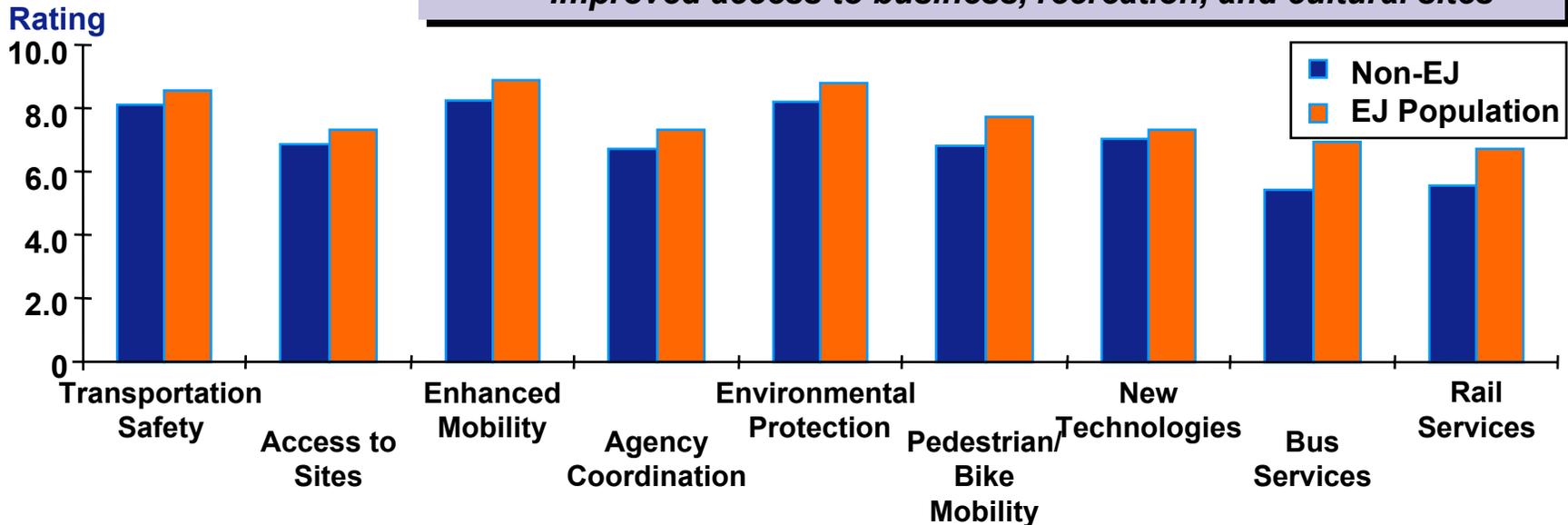
- **“Alleviating traffic congestion” most important in northwest Indiana**
  
- **Transit very important in northwest Indiana and Marion County. More importance placed on**
  - **“Improving bus services”**
  - **“Improving passenger rail services”**

# How EJ Populations Differ from General Population<sup>1</sup>

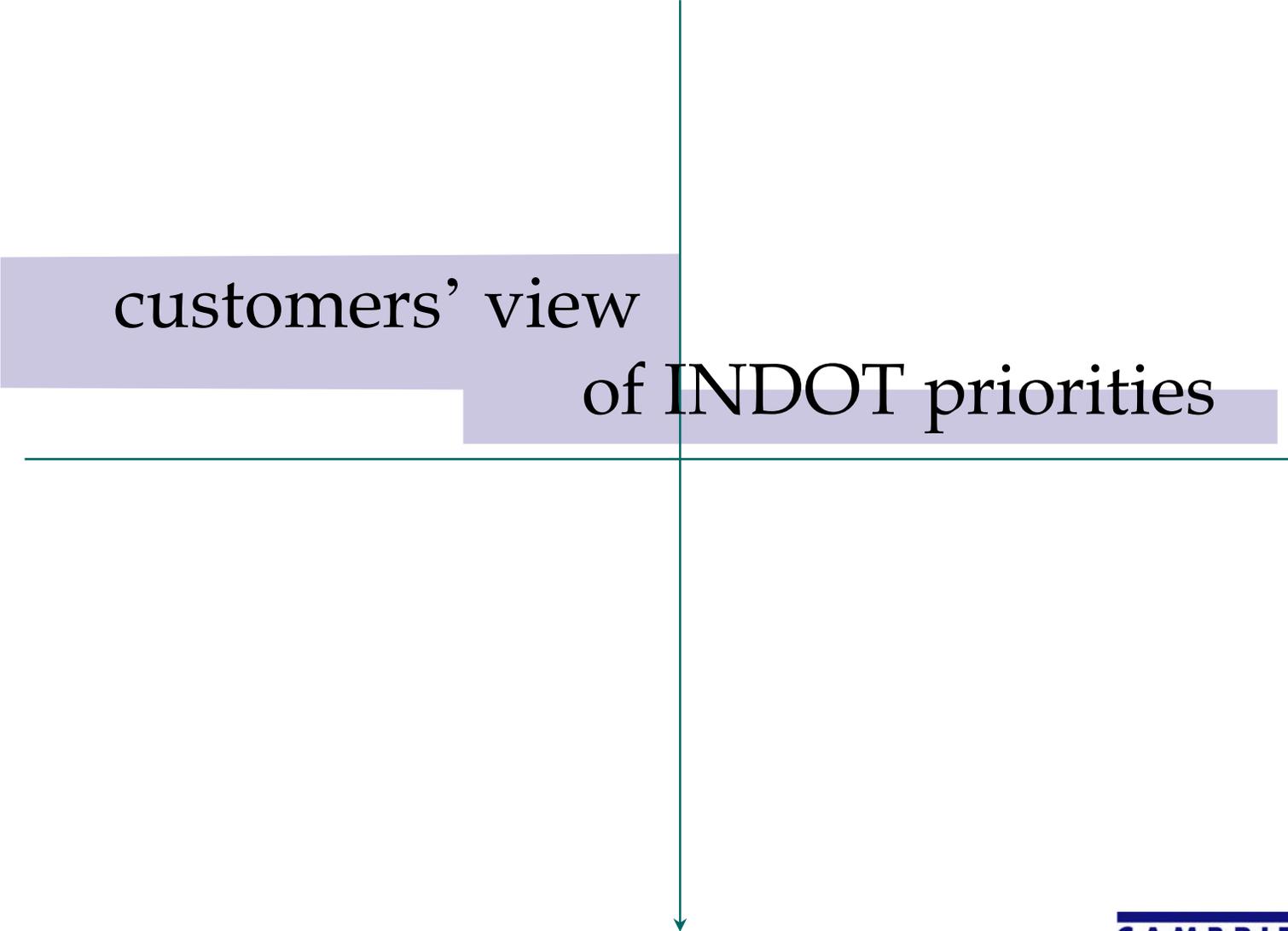
*EJ population places greater importance on most statements*

*Greatest difference in importance is placed on*

- *Improvements in bus and passenger rail service*
- *Enhanced mobility for low income, disabled, and elderly*
- *Improved access to business, recreation, and cultural sites*



<sup>1</sup> More detail on this topic is provided in a separate memorandum



customers' view  
of INDOT priorities

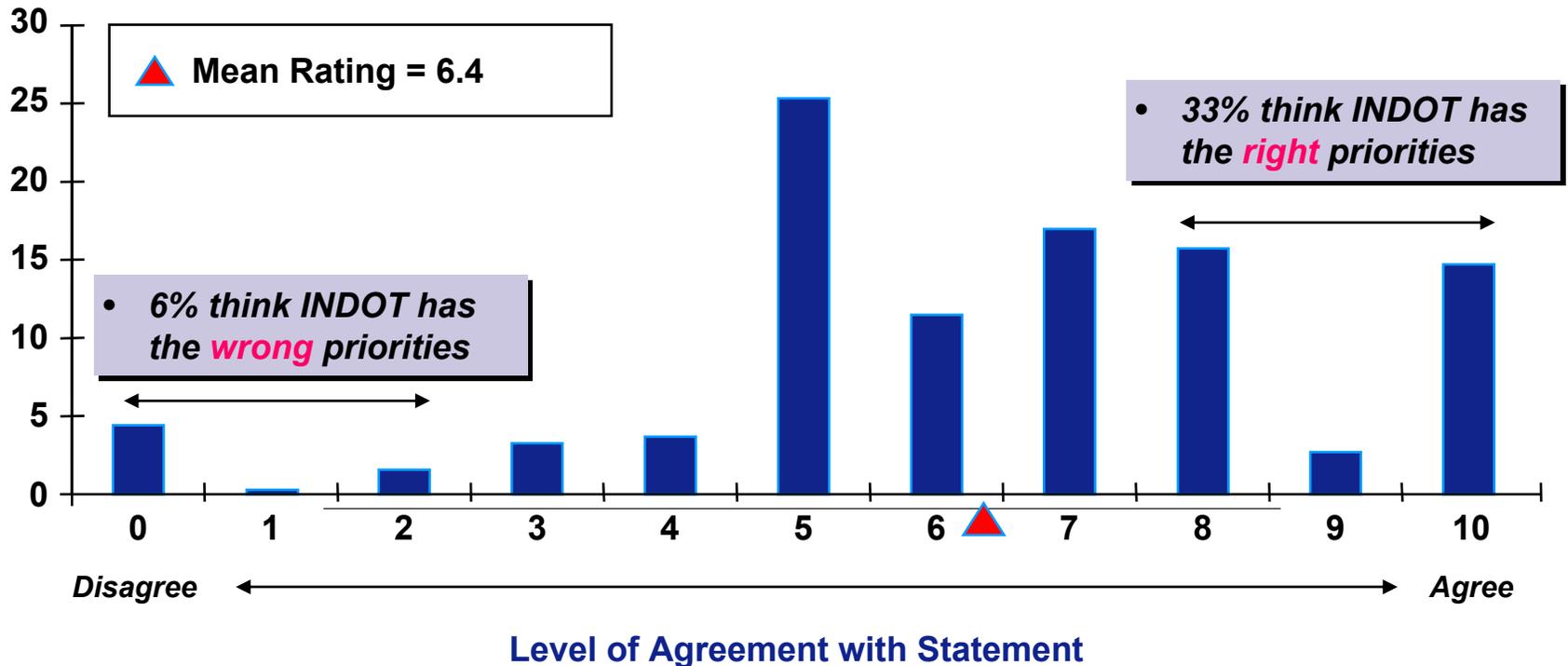
# ***Do INDOT's Customers Think it Has the Right Priorities?***

- **We asked these questions**
  - **Overall, is INDOT on the right track?**
  - **Unaided, what do the customers say?**
  - **Does INDOT devote too much or too little attention to certain policy areas?**
  - **Are INDOT's spending priorities in the right place?**
  - **How did these answers vary by market segment?**

# INDOT's Overall Priorities

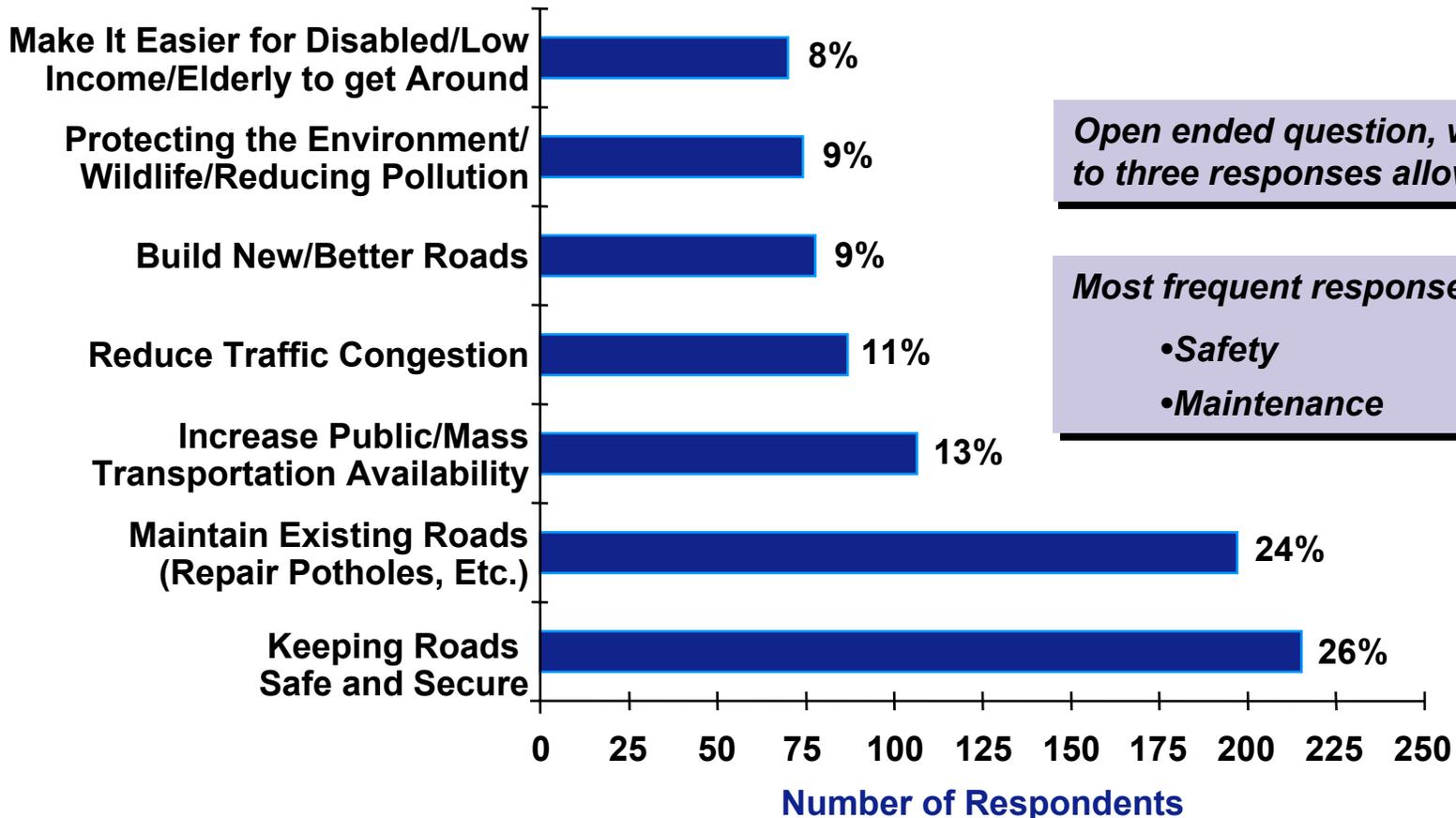
*“When it comes to improving transportation in Indiana, I feel that, overall, INDOT has got the right priorities.”*

Percent of Respondents



# What Should INDOT's Top Priorities Be?

*"In your opinion, what should be INDOT's top priorities in the future?"*



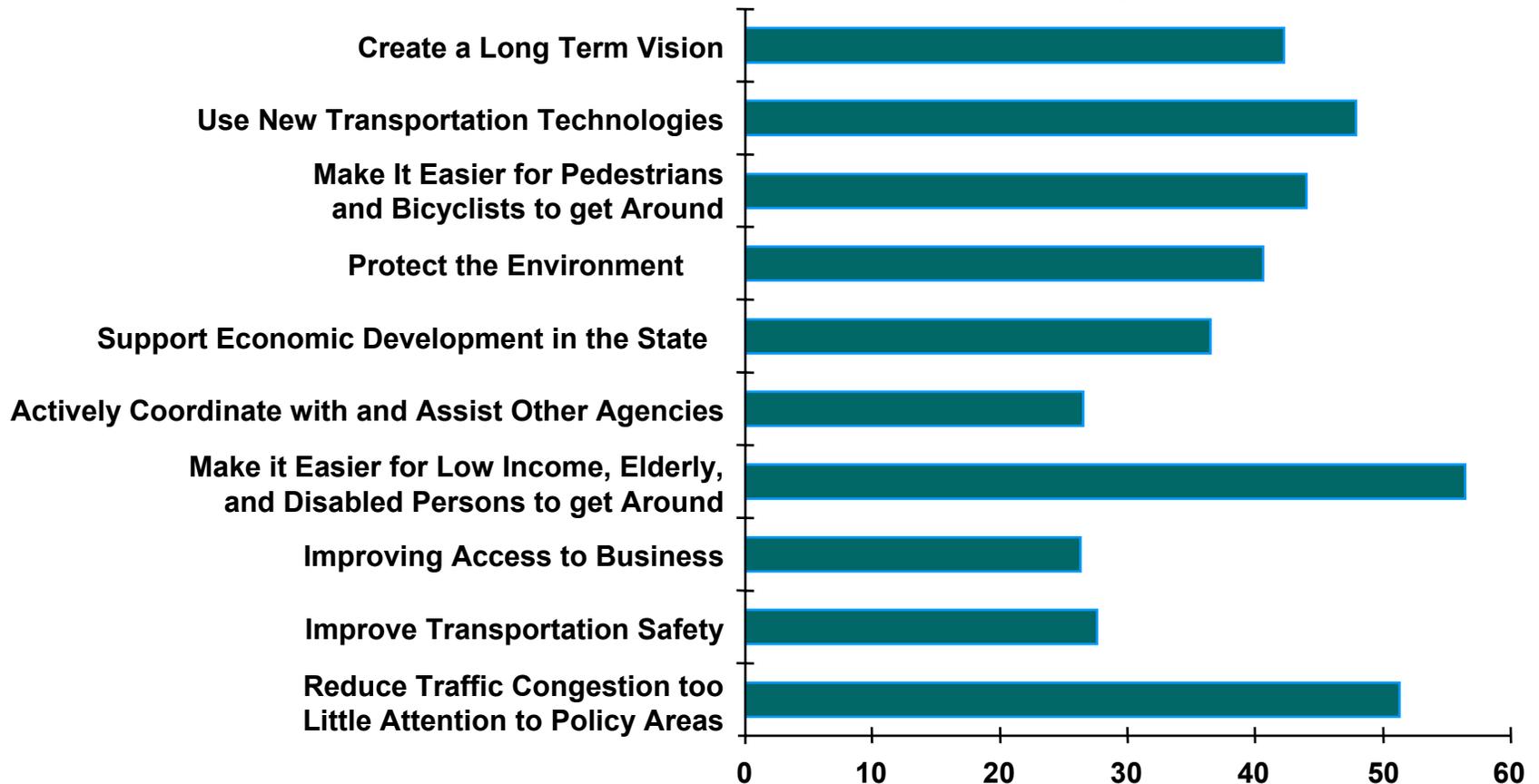
*Open ended question, with up to three responses allowed*

*Most frequent responses were*

- Safety
- Maintenance

# ***“Does INDOT Give too Little, About the Right Amount, or too Much Attention to these Policy Areas?”*** ***Nine Policy Areas from Policy Plan***

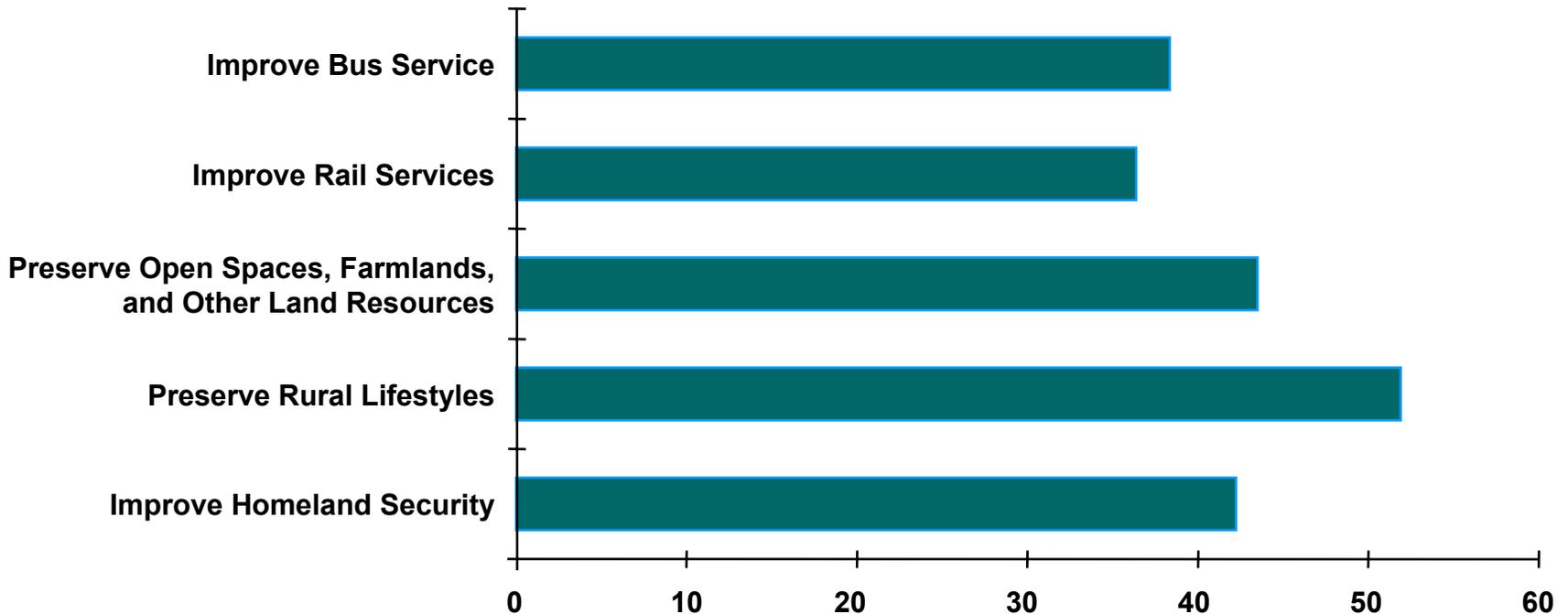
*Percent indicating “too little”*



# **“Does *INDOT* Give too Little, About the Right Amount, or too Much Attention to these Policy Areas?”**

## **Emerging Policy Areas**

*Percent indicating “too little”*

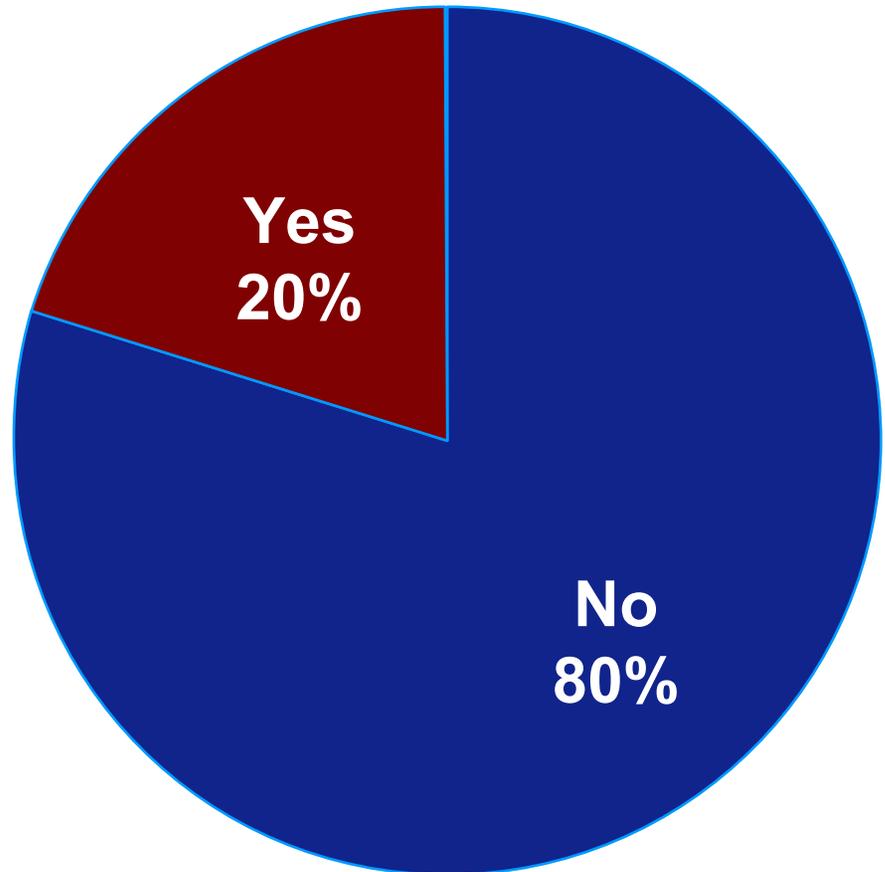


## Change the Current Funding Allocation?

Last year, INDOT spent about

- 70 percent of its available construction funds on paving and maintaining highways and repairing bridges
- 20 percent on new roadway projects, and
- 10 percent on non-highway programs, like public transit and airports

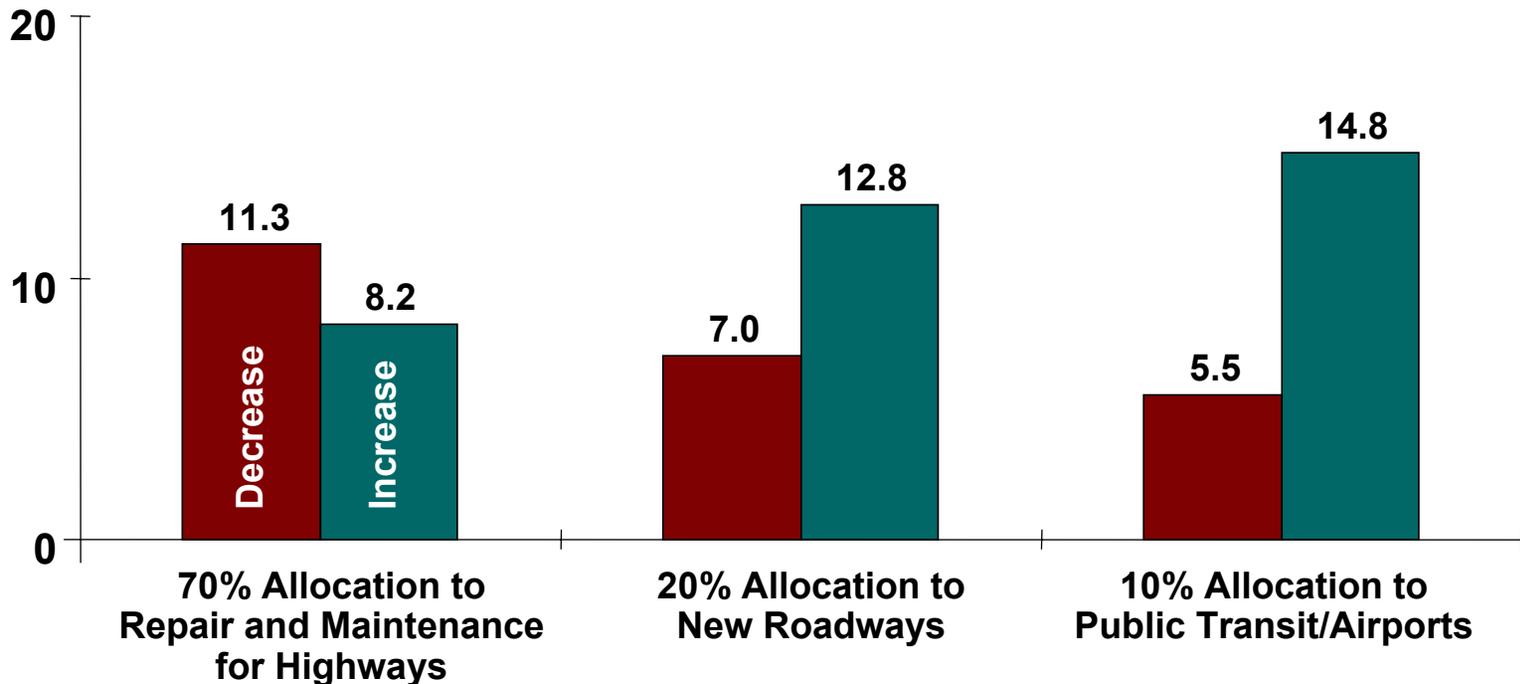
*If it were up to you, would you use the same allocation?*



# Should INDOT Adjust its Funding Allocation?

*Respondents Who Want to See a Reallocation of Funding by INDOT  
(refer to question on previous page)*

Percent of Respondents



## ***How Did Answers Vary by Market Segment?***

- **Members of the EJ population believe that INDOT pays too little attention to**
  - **Improving access to business, recreation, and cultural sites**
  - **Making it easier for low income, elderly, and disabled to move around**
  - **Coordinating with other agencies**
  - **Improving bus services**
  
- **Lake County and rural southern Indiana residents believe INDOT pays too little attention to reducing traffic congestion**
  
- **Lake and Marion County residents believe INDOT pays too little attention to improving bus services**

INDOT services —  
importance and  
satisfaction

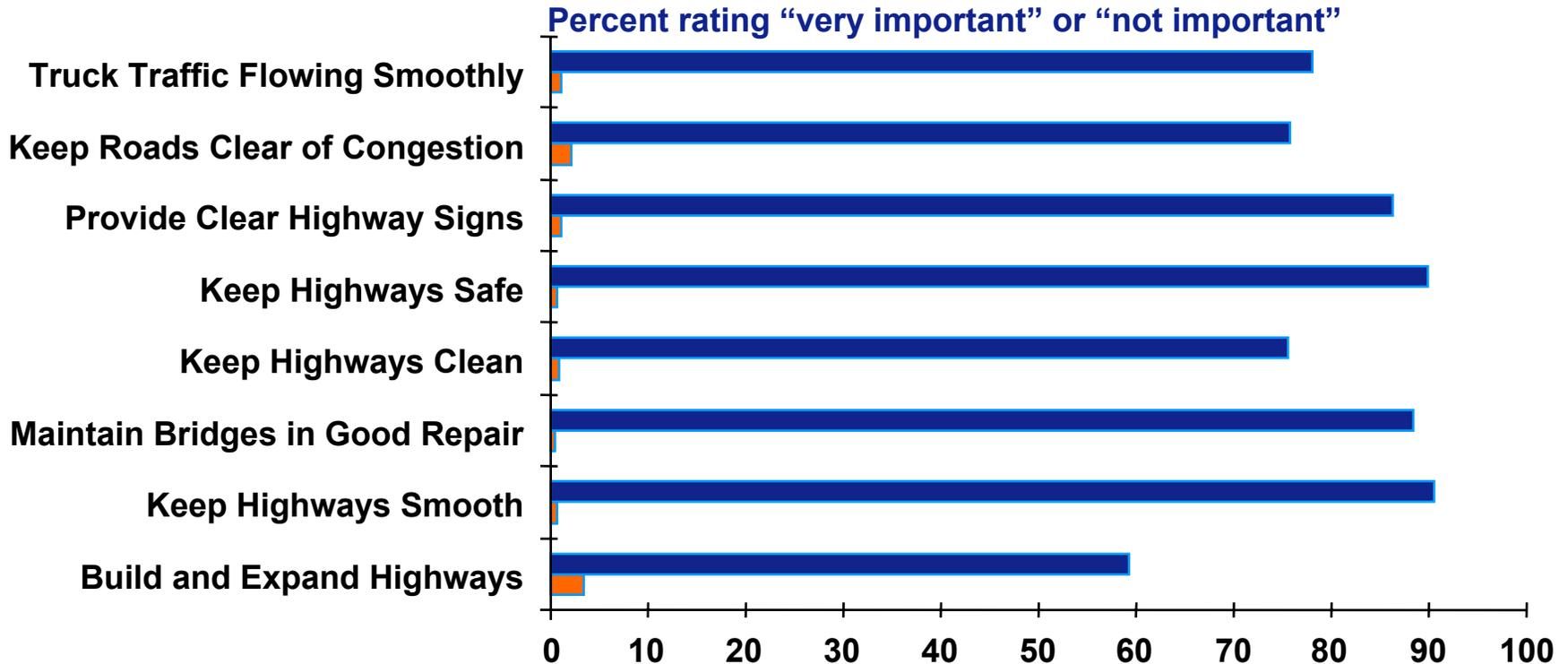
## **INDOT Services**

- **Questions focused on eight specific services provided by INDOT**
  - **Probed two dimensions of respondents' perceptions**
    - Importance of each INDOT service
    - Satisfaction with each aspect of service
  
- **The results tell us**
  - **What do customers think is important?**
  - **Where does INDOT service lag?**
  - **How can INDOT focus on service weaknesses that are important to its customers?**

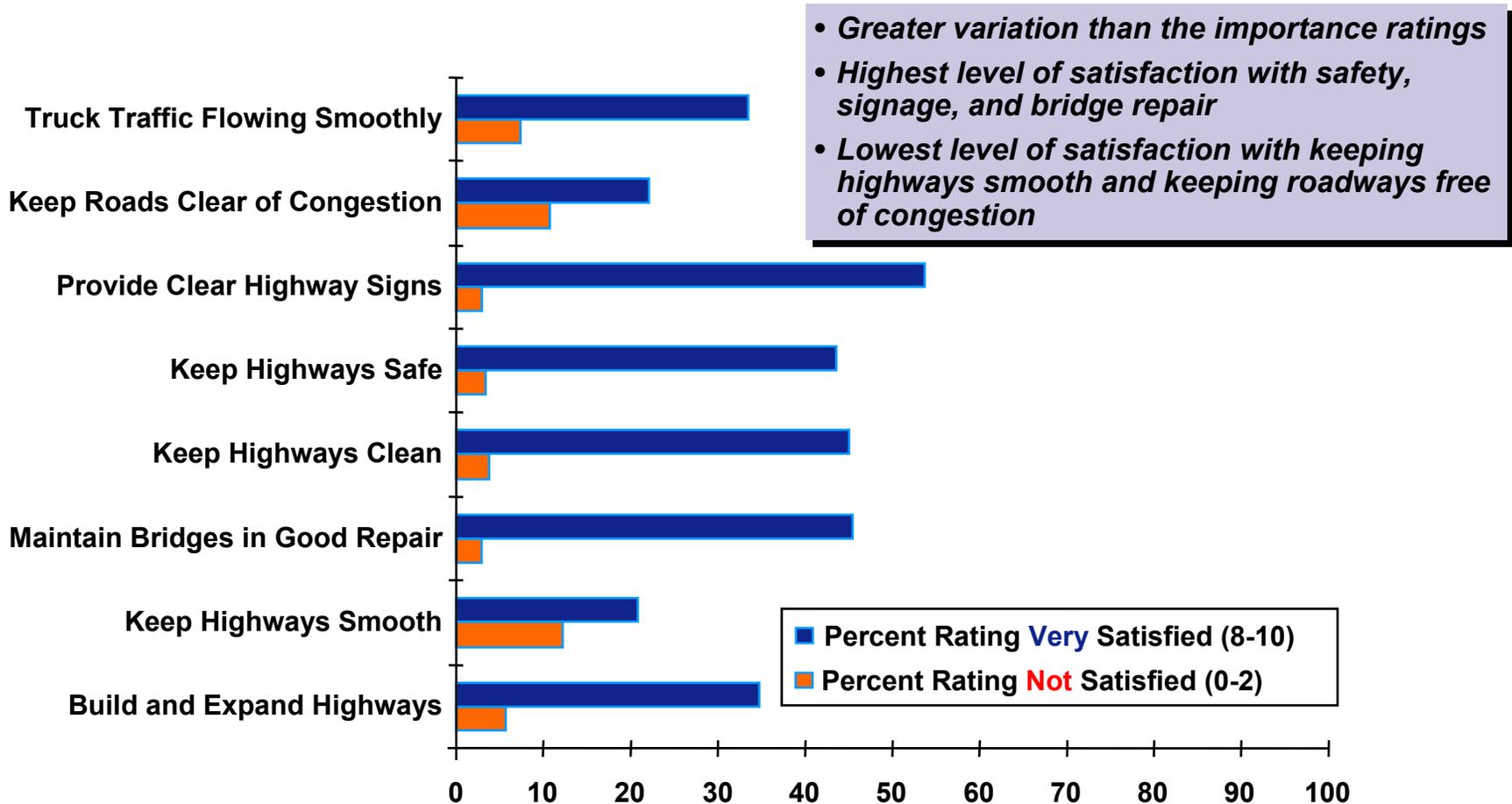
# How Important are These INDOT Services to You?

- High stated importance across the board
- Most important services include safety, good repair of bridges, and keeping highways smooth.
- Least important is “building and expanding highways”

■ Percent Rating **Very** Important (8-10)  
■ Percent Rating **Not** Important (0-2)



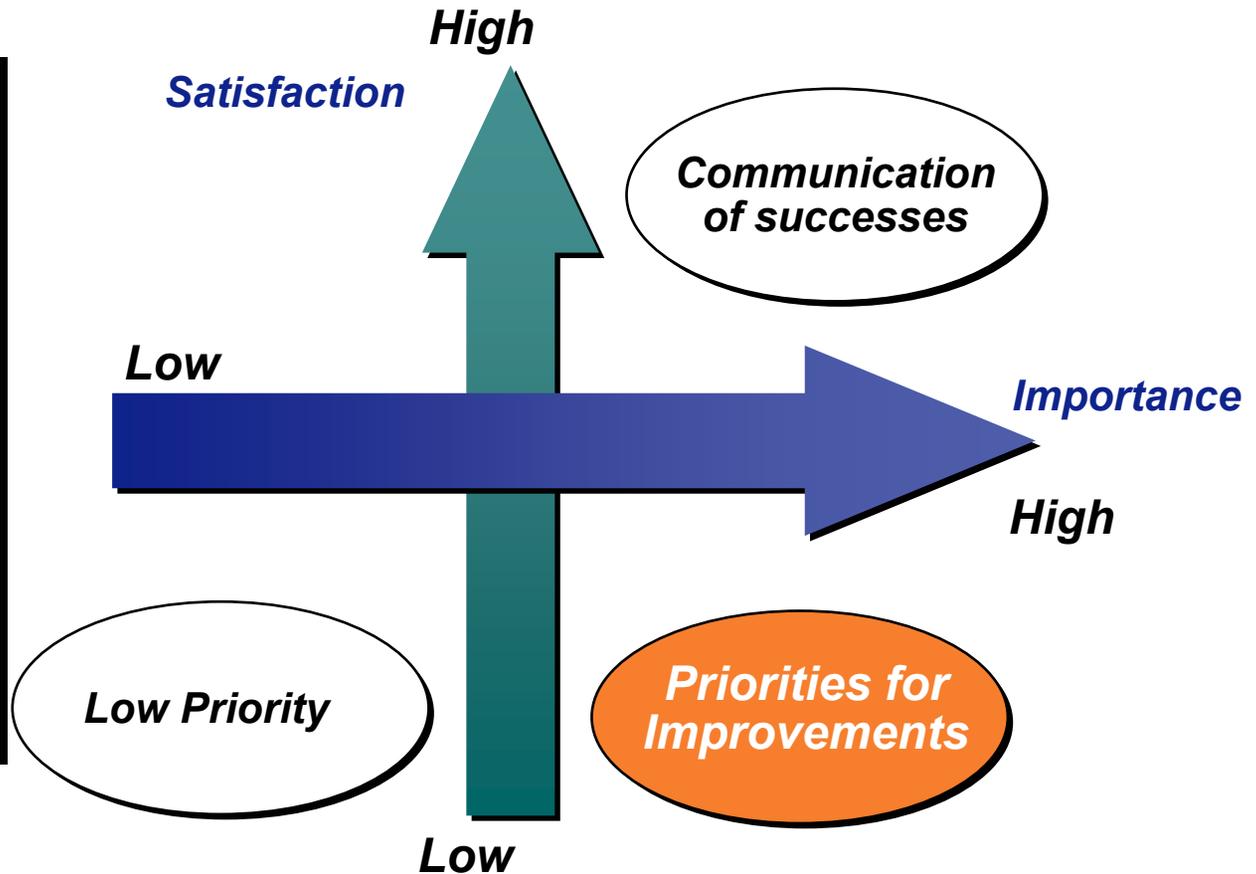
# How Satisfied are You With the Services that INDOT Provides?



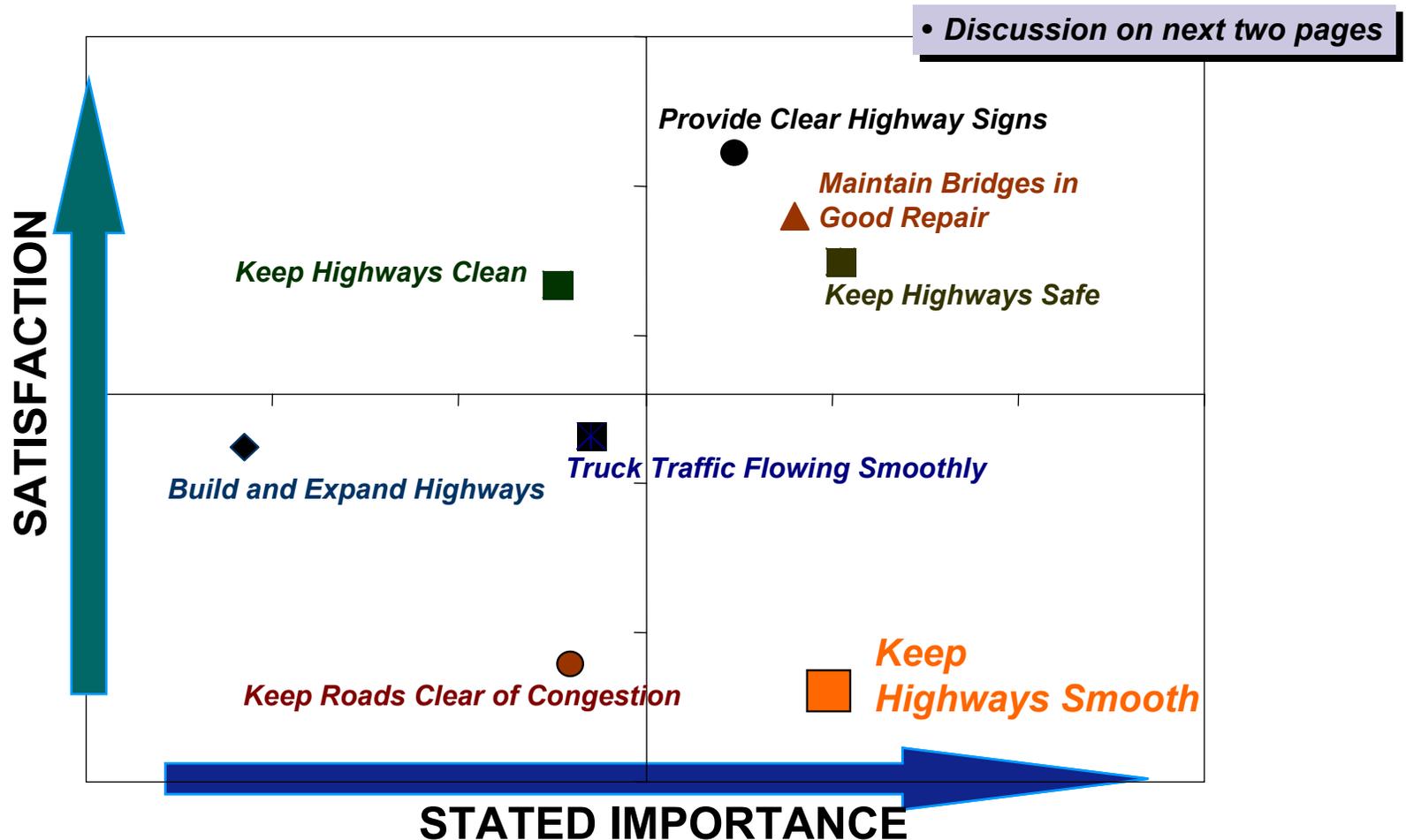
# Satisfaction Versus Importance Analysis Framework

Comparing the importance customers place on certain services to their satisfaction with those services gives INDOT some clues as to where to focus their attention.

Areas which are important to customers are on the right side. Areas with low satisfaction are at the bottom. So, areas that show up towards the bottom right hand corner of the chart on the next page are those where INDOT should focus its attention



# Satisfaction Versus Importance Results



# ***Satisfaction Versus Importance Strengths***

- **Clear success stories**
  - **Safety – “keep highways safe”**
  - **Signage – “provide clear highway signs”**
  - **Level of bridge repair – “maintain bridges in good repair”**
  
- **What should INDOT do about these?**
  - **Communicate success to the public**
  - **Monitor service offered to ensure continuity**

# **Satisfaction Versus Importance**

## **Weaknesses**

- **Important areas that need to receive attention by INDOT**
  - **Pavement maintenance – “keeping highways smooth”**
  - **Congestion management – “keep roads free of congestion”**
  - **Truck traffic management – “truck traffic flowing smoothly”**
- **INDOT should develop performance measures to**
  - **Verify perceptions**
  - **Locate problem spots**
  - **Determine and implement changes**
- **INDOT should monitor service and communicate improvements to the public**

## ***How Did Satisfaction Vary by Market Segments?***

- **“Keeps truck traffic flowing smoothly”**
  - **Lake County residents were significantly less satisfied**
  - **Northern Indiana rural county residents were the most satisfied**
  
- **“Keeps roads clear of congestion”**
  - **Lake and Marion County residents were less satisfied**
  - **Northern Indiana rural county residents were most satisfied**

## ***How Did Importance Vary by Market Segments?***

- **“Keeping highways free of congestion”**
  - **Most important to Lake County residents and EJ respondents**
  - **Much less important to residents of rural counties**
  - **Very important to women respondents**
  
- **“Build and expand highways to keep pace with land development”**
  - **Most important to Lake County residents**
  - **Least important to rural county residents**
  
- **Women placed greater importance on safety, signage, and a smooth flow of truck traffic**

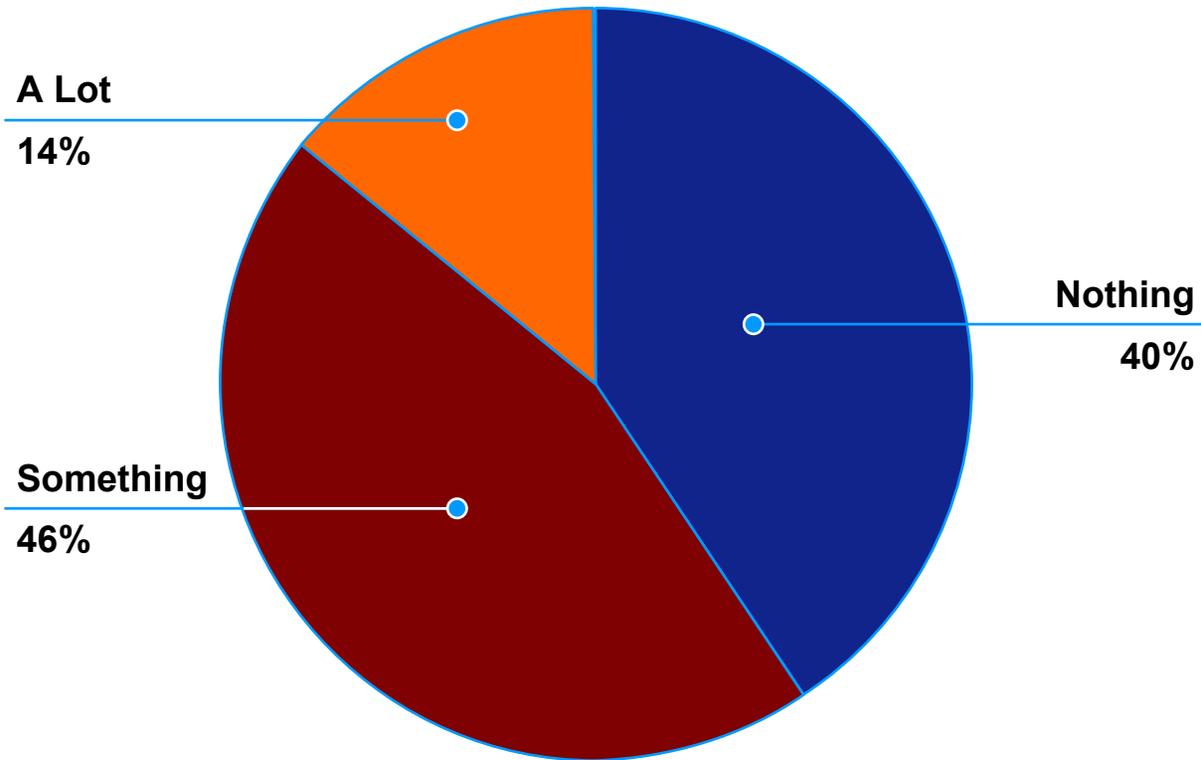
attitudes

towards INDOT -  
awareness and image

## ***Attitudes toward INDOT – Awareness and Image Summary (details follow)***

- **Customers indicate a reasonable level of INDOT awareness during last 12 months**
  - 14 percent very aware of INDOT “in the news”
  - 46 percent had heard something about INDOT
- **Customers image of INDOT generally neutral**
- **Customers view of INDOT over the past 12 months is generally steady or improving**
  - Has deteriorated (9 percent)
  - Has stayed the same (59 percent)
  - Has improved at least somewhat (32 percent)

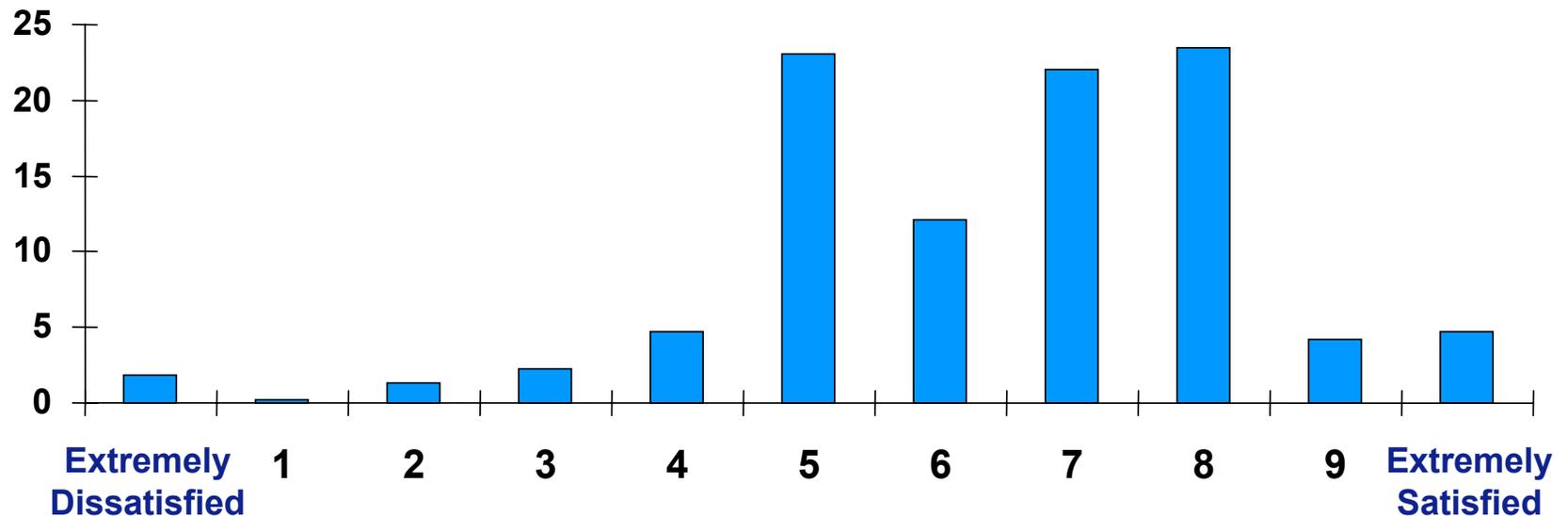
# How Much Have You Heard About INDOT Lately?



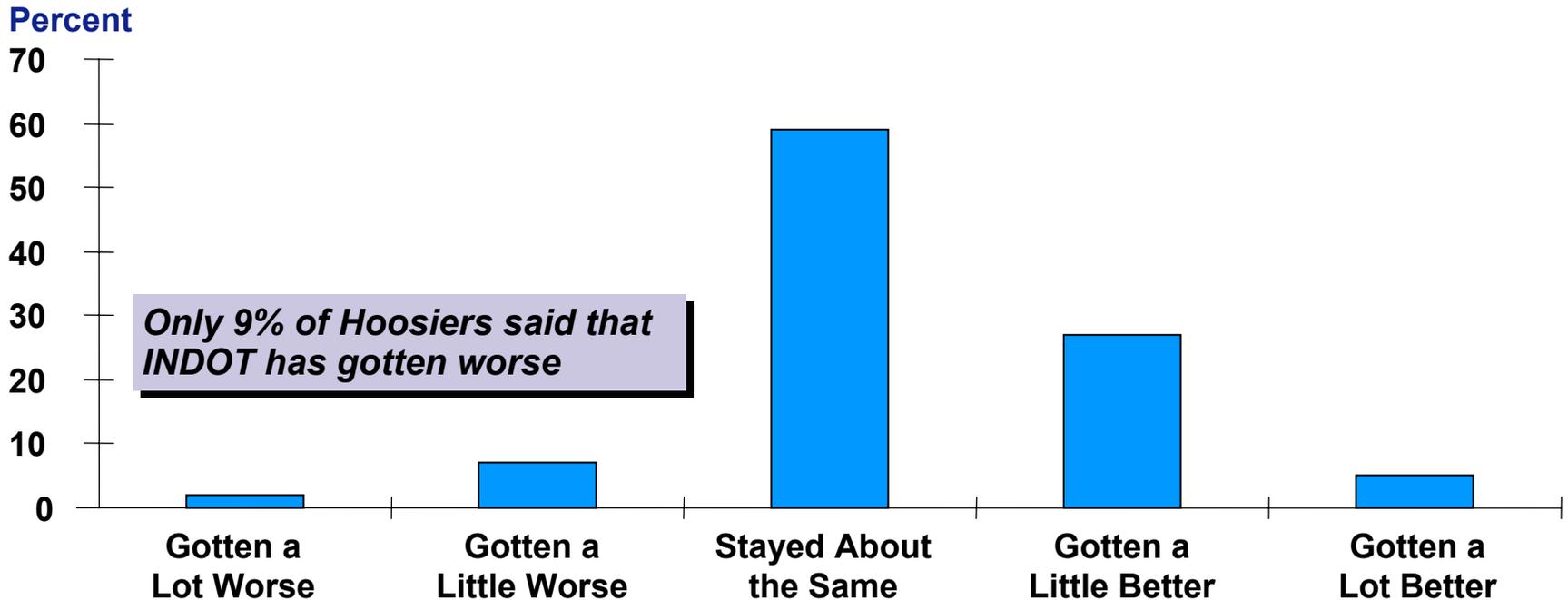
# Overall Satisfaction with INDOT

- *Most respondents satisfied with INDOT*
- *Very few respondents with strongly negative feelings*
- *No differences by market segment were identified*

Percent of Respondents

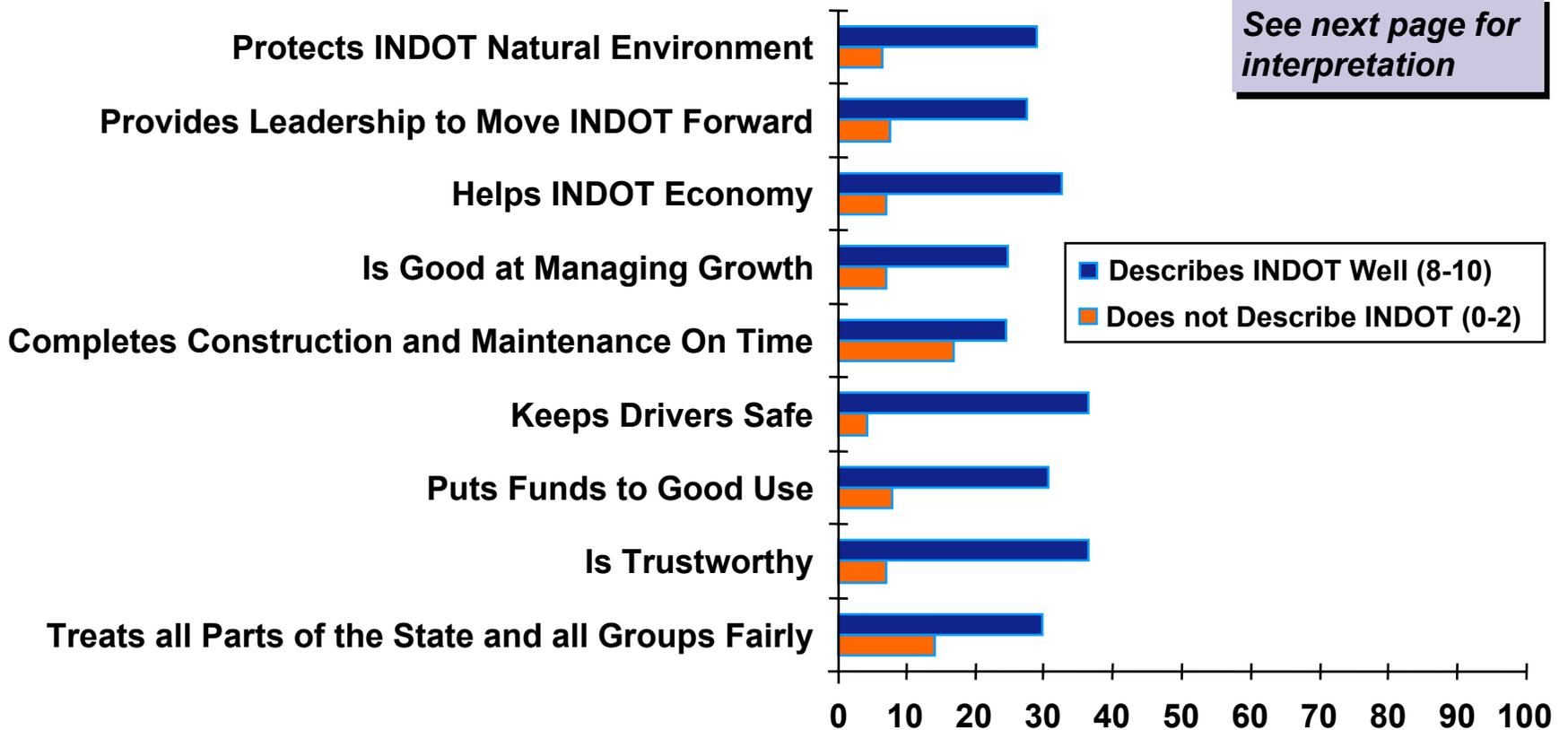


# In the Past 12 Months, Has INDOT's Performance...



# Image Ratings

*“How well does this phrase describe INDOT (0-10 scale)?”*



## ***Image Ratings Interpretation***

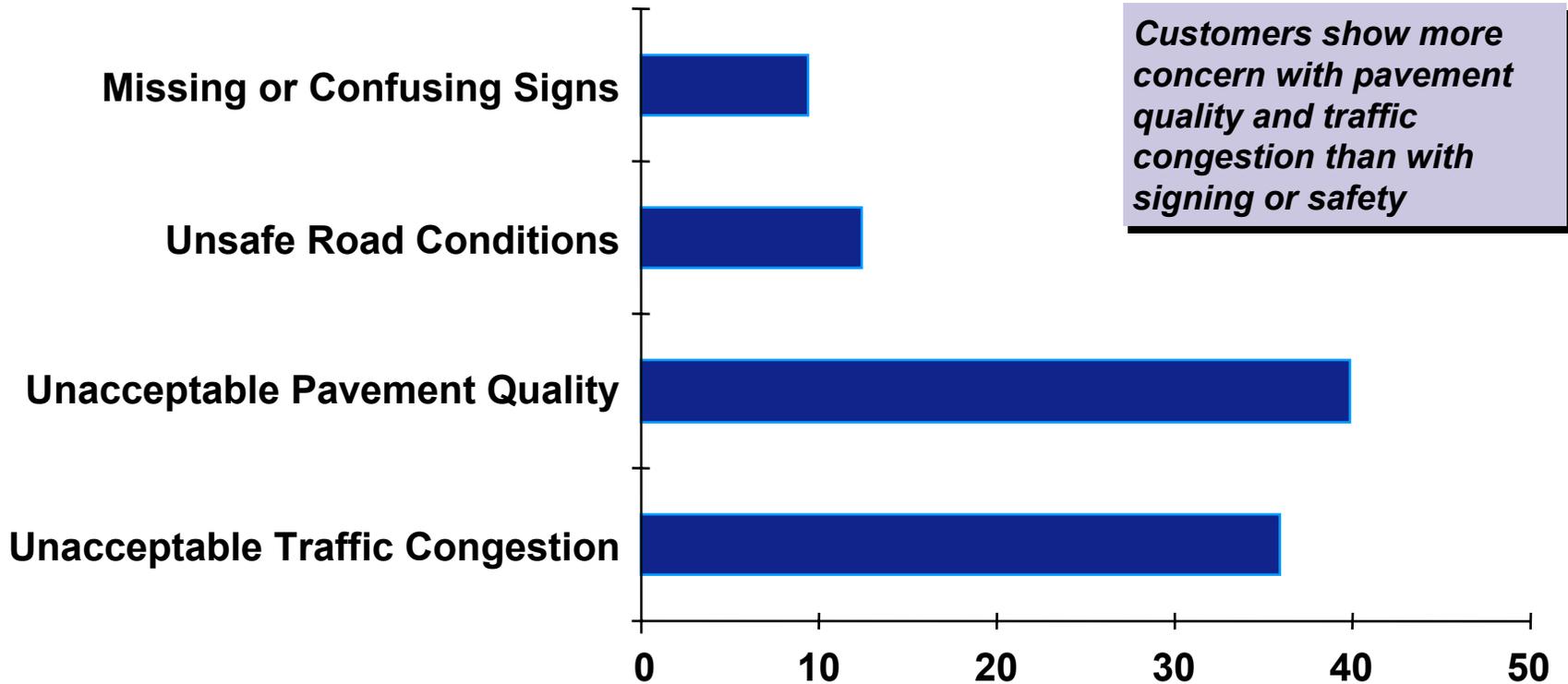
- **The majority of respondents have a “neutral” view of INDOT image**
- **A third or more believe that INDOT performs well in —**
  - **Trustworthiness**
  - **Keeping drivers safe**
  - **Helping Indiana’s economy**
- **There was greater dissatisfaction with INDOT in these categories —**
  - **Completing construction/maintenance projects on time**
  - **Treating all parts of the state fairly**

recent experiences with

INDOT highway  
facilities

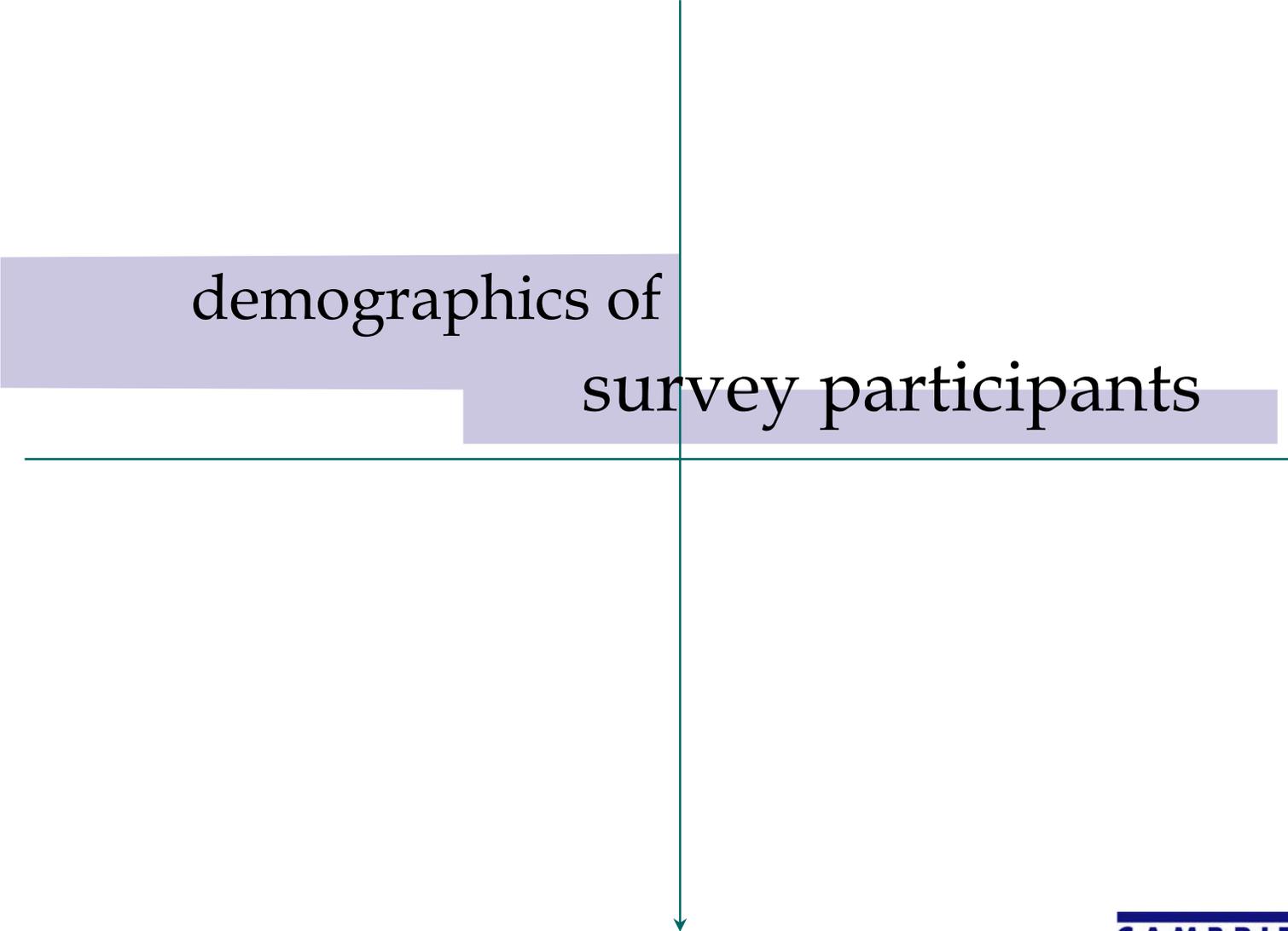
# Recent Experiences with INDOT Highways

*“In the past 30 days, how often have you encountered....?”*



*Customers show more concern with pavement quality and traffic congestion than with signing or safety*

*Respondents Responding “Frequently” and “Almost Every Day” (in Percent)*



demographics of  
survey participants

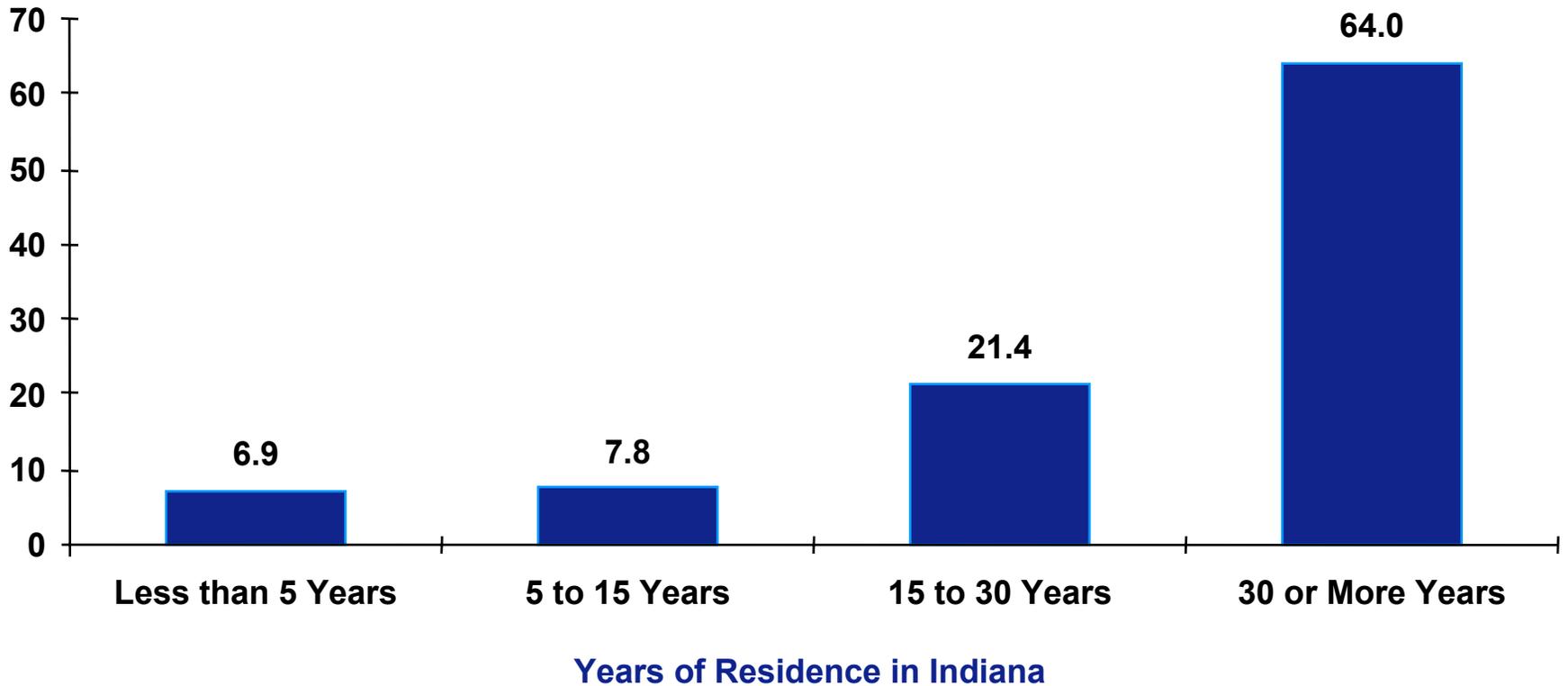
# ***Demographics of Survey Participants***

## ***Summary (details follow)***

- **Generally consistent with year 2000 Census data**
- **Representative of different areas in the state**
- **Majority of respondents are long-time residents of the state**

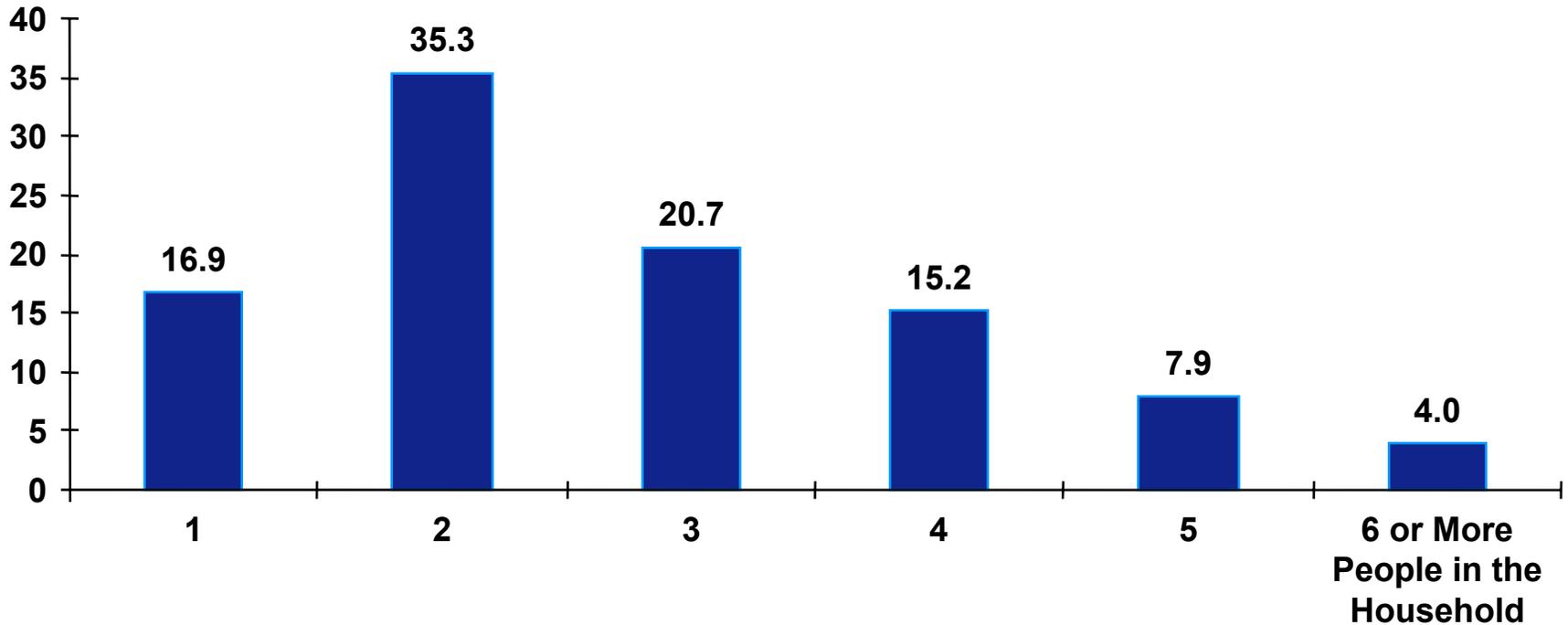
# How Long Have You Lived In Indiana?

Percentage



# Household Size

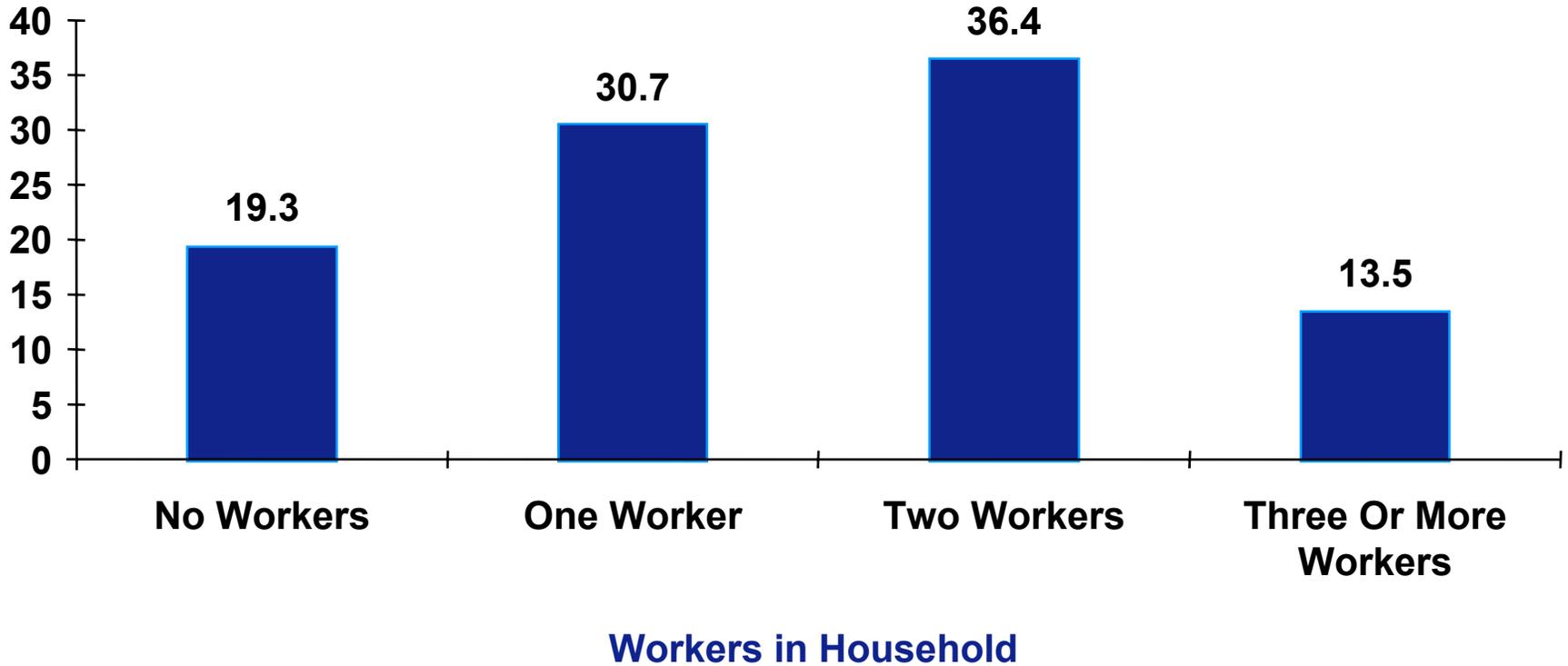
Percentage



Household Size

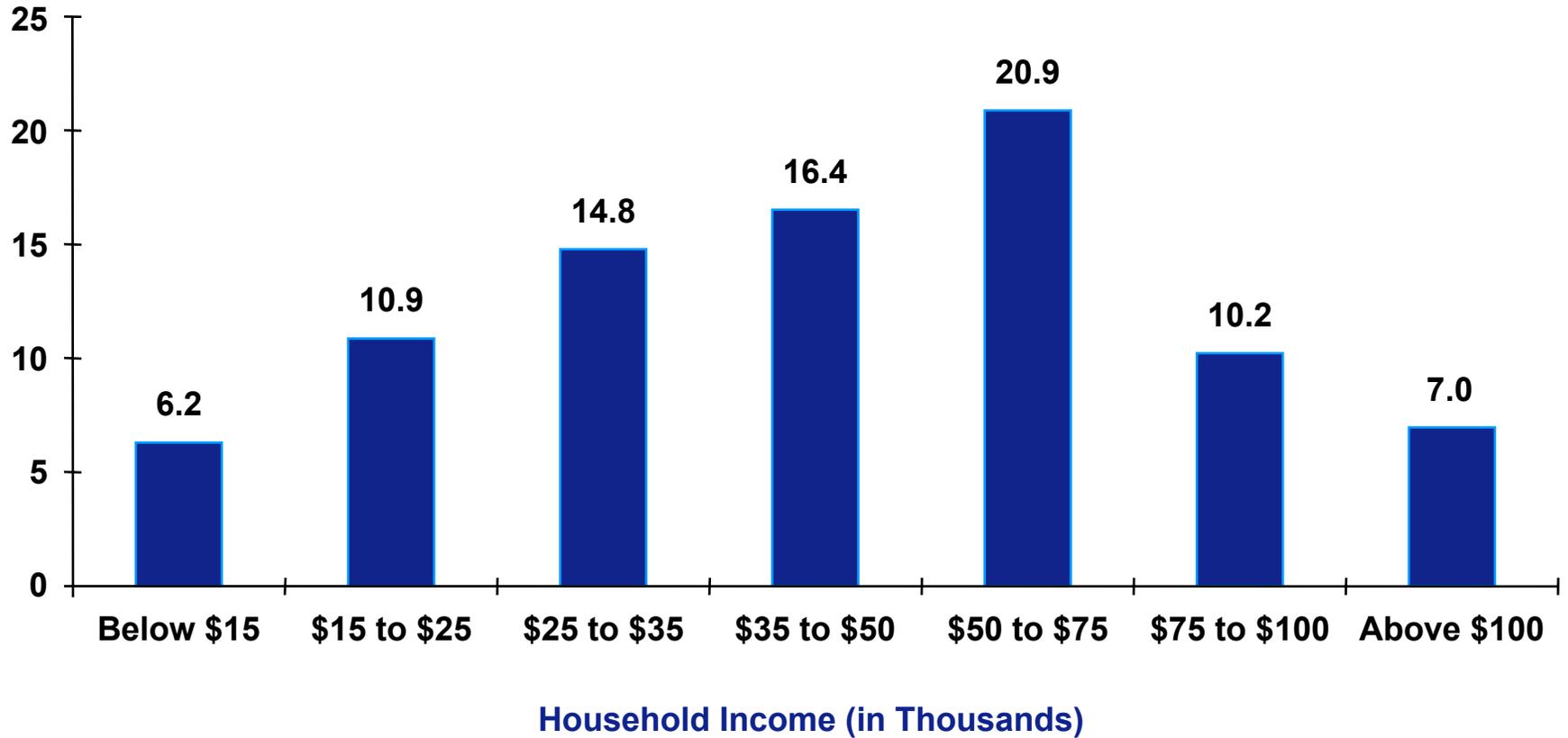
# Household Workers

Percentage

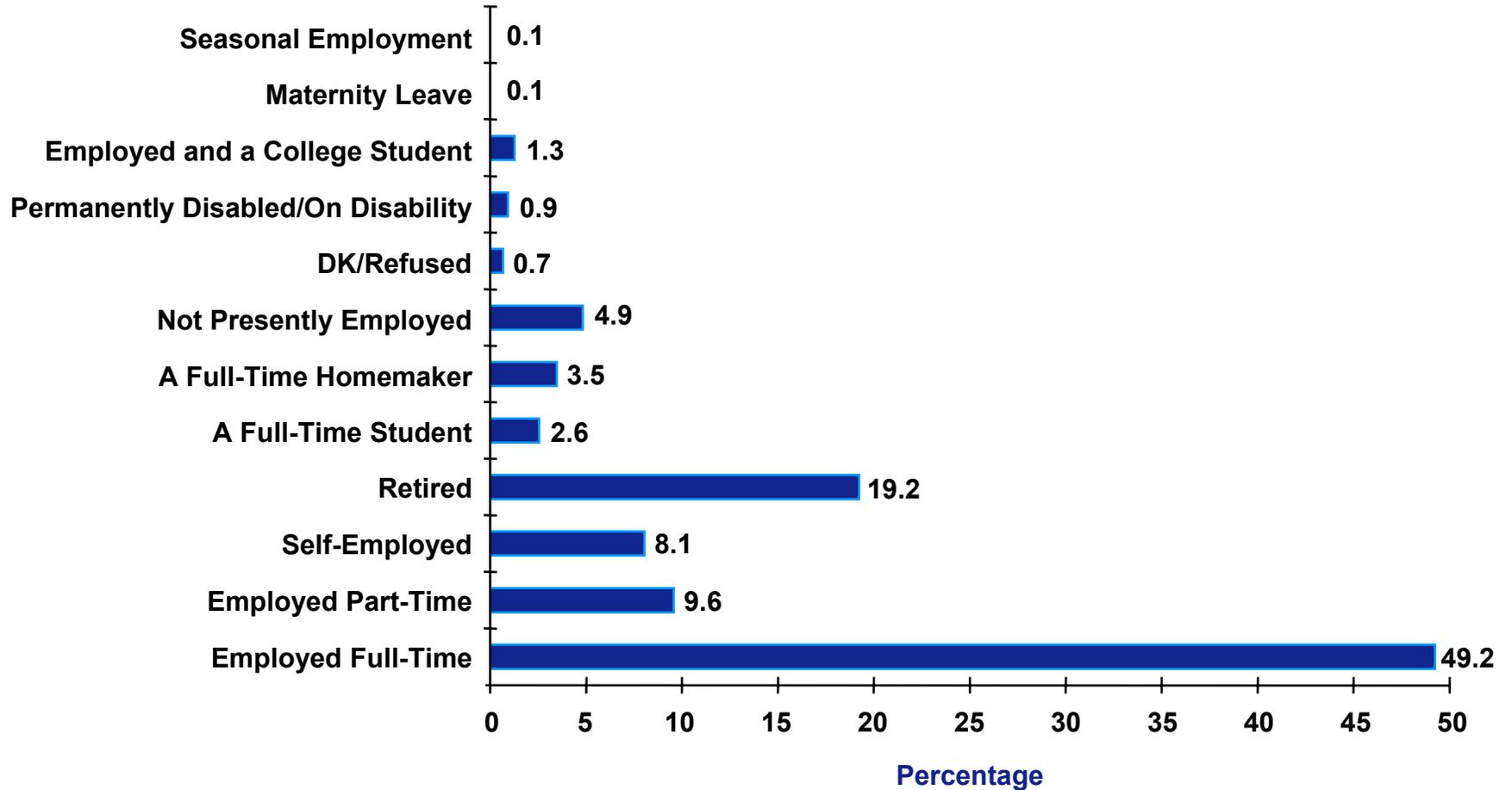


# Household Income Distribution

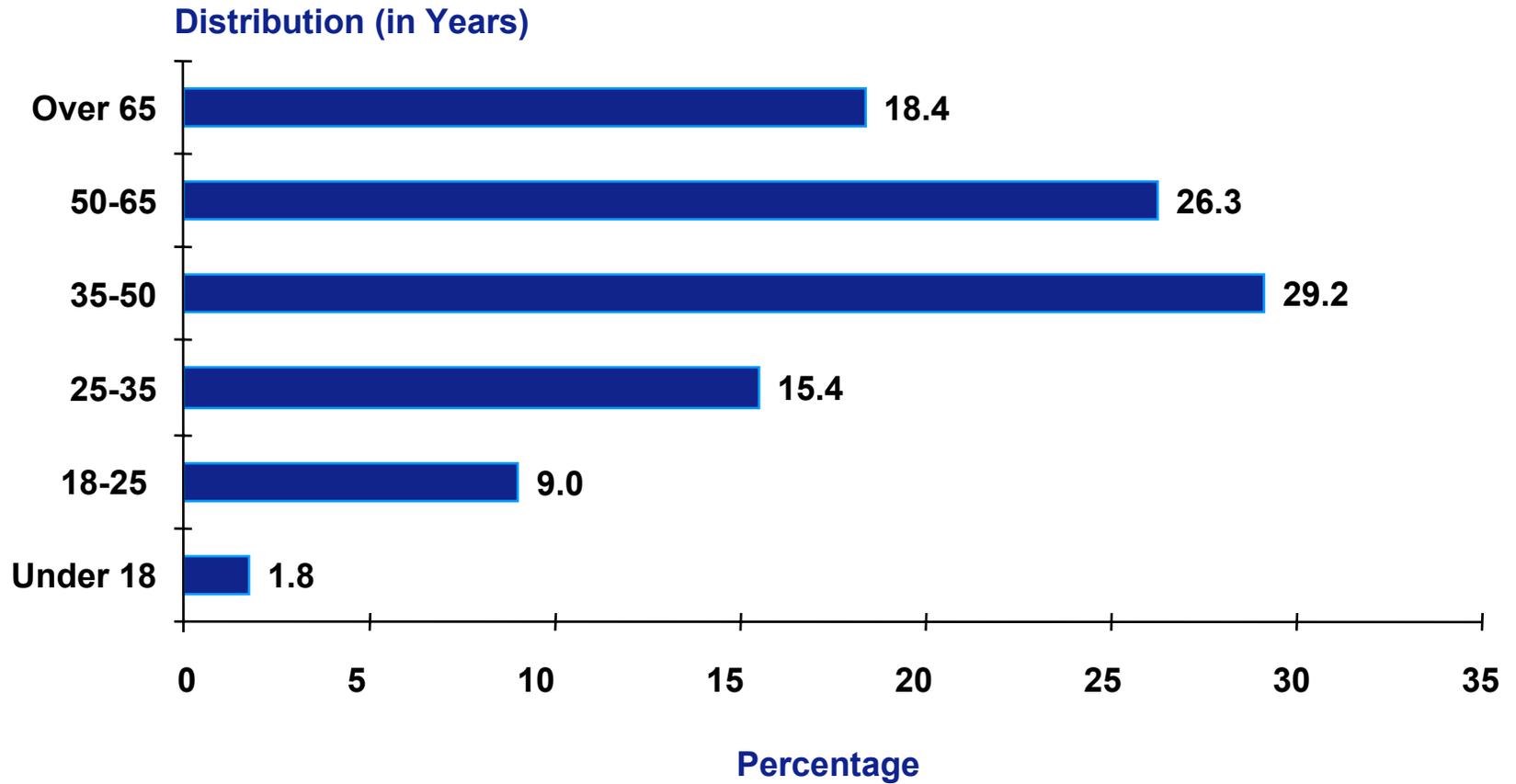
Percentage



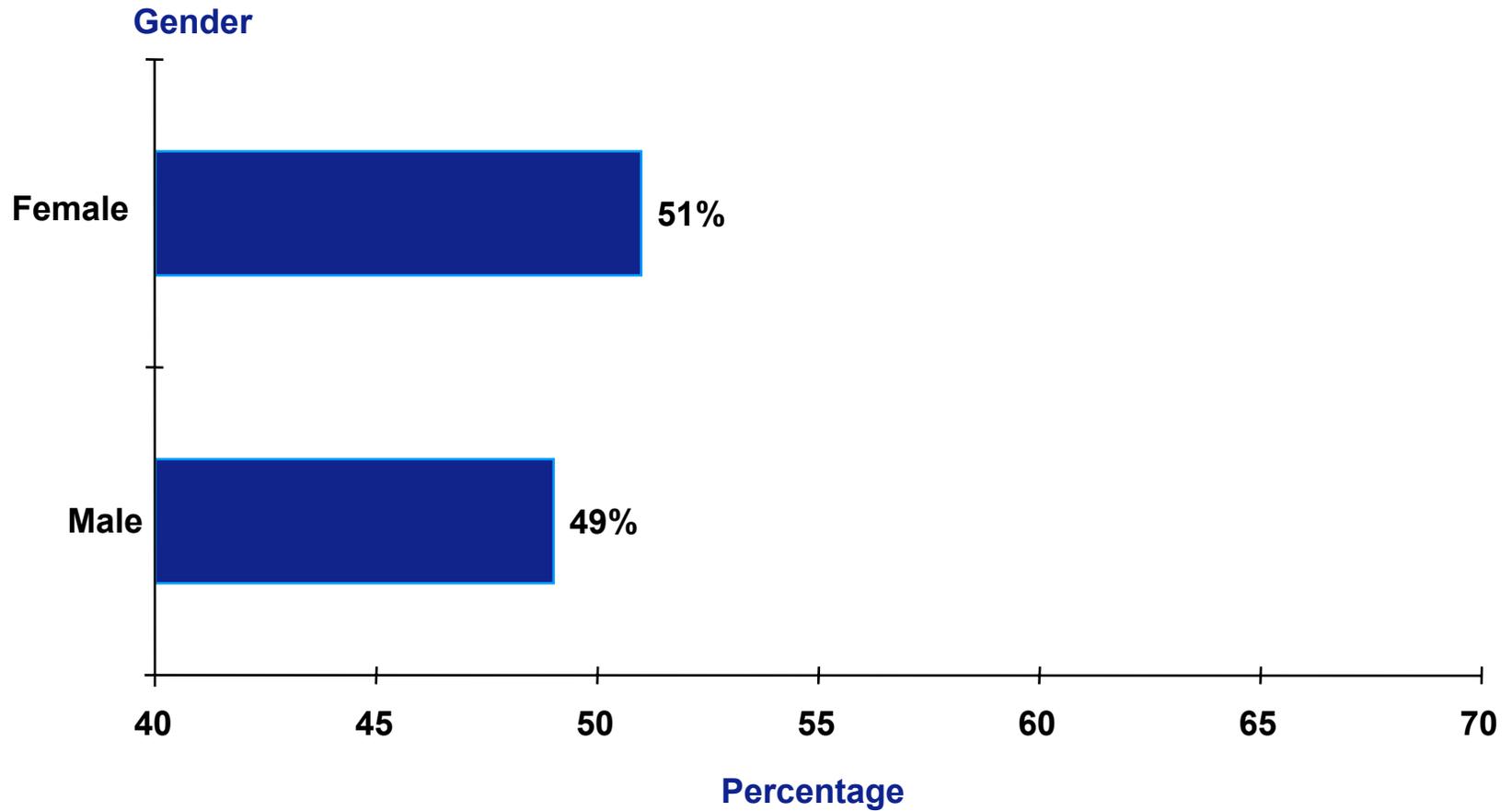
# Respondent Employment Status



# Respondent Age Distribution



# Respondent Gender



# Respondent Race/Ethnic Identity

